

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeq transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
A2M		103950	CPAMD5 S863-7 FWP007
A2ML1		610627	CPAMD9 FLJ25179 p170
A4GALT		607922	P(k) A14GALT P1 Gb3S
AAAS		605378	
AAGAB		614888	FLJ11506 p34
AANAT		600950	SNAT
AARS1		601065	CMT2N AlaRS AARS
AARS2		612035	KIAA1270 bA444E17.1 AARSL
AASS		605113	LKRSDH LORS DH
AATF		608463	DED CHE-1 CHE1 BFR2
ABAT	NM_001386615:6	137150	GABA-T GABAT
ABCA1		600046	HDLDT1 ABC1 TGD
ABCA12		607800	ICR2B LI2 DKFZP434G232
ABCA13		607807	FLJ33876 FLJ33951
ABCA3		601615	ABC-C LBM180 ABC3 EST111653
ABCA4		601691	STGD1 RP19 STGD ARMD2 CORD3 FFM

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			ABCR
<i>ABCA5</i>		612503	EST90625
<i>ABCA7</i>		605414	ABCX
<i>ABCA8</i>		612505	KIAA0822
<i>ABCB1</i>	NM_001348945:3-5	171050	P-gp GP170 CD243 MDR1 ABC20 CLCS PGY1 p-170
<i>ABCB11</i>		603201	PGY4 ABC16 PFIC-2 BSEP SPGP PFIC2
<i>ABCB4</i>		171060	MDR2 GBD1 MDR3 PGY3 PFIC-3
<i>ABCB6</i>		605452	umat MTABC3 EST45597
<i>ABCB7</i>		300135	Atm1p ABC7 EST140535 ASAT
<i>ABCC1</i>		158343	MRP MRP1 GS-X
<i>ABCC11</i>		607040	MRP8
<i>ABCC12</i>		607041	MRP9
<i>ABCC2</i>		601107	DJS MRP2 cMRP CMOAT
<i>ABCC3</i>		604323	cMOAT2 EST90757 MLP2 MRP3 MOAT-D
<i>ABCC4</i>		605250	MOATB MRP4 MOAT-B EST170205
<i>ABCC6</i>	NM_001171:1-9 NM_001079528.4:all	603234	URG7 MRP6

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	NM_001351800:3-9		PXE MLP1 EST349056 ARA
ABCC8		600509	TNDM2 HI ABC36 HRINS SUR1 HHF1 SUR PHHI MRP8
ABCC9		601439	CMD10 SUR2
ABCD1		300371	ALD adrenoleukodystrophy ALDP AMN
ABCD3		170995	ZWS2 PMP70 PXMP1
ABCD4		603214	EST352188 P70R PXMP1L PMP69
ABCG1	NM_207629:1	603076	ABC8
ABCG2		603756	EST157481 BCRP MXR ABCP CD338
ABCG5		605459	STSL
ABCG8		605460	GBD4
ABHD12		613599	ABHD12A C20orf22 BEM46L2 dJ965G21.2 DKFZP434P106
ABHD14A-ACY1	NM_001316331:2-3		
ABHD5		604780	CGI-58 NCIE2
ABL1		189980	c-ABL JTK7 ABL p150
ABL2		164690	ARG ABLL
ABRAXAS1		611143	FLJ13614 ABRA1

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			FAM175A CCDC98 ABRAXAS
ABRAXAS2		611144	Em:AC068896.4 ABRO1 KIAA0157 FAM175B
ACAA1		604054	Lnc-Myd88
ACAD8		604773	
ACAD9		611103	NPD002 MGC14452
ACADL		609576	ACAD4 LCAD
ACADM		607008	MCAD ACAD1 MCADH
ACADS		606885	ACAD3 SCAD
ACADSB		600301	SBCAD ACAD7
ACADVL		609575	LCACD ACAD6 VLCAD
ACAN	NM_001369268:12,14 NM_001135:12 NM_013227:12	155760	CSPG1 MSK16 AGC1 CSPGCP
ACAT1		607809	ACAT THIL
ACBD5	NM_001352568:6 NM_001352569:6 NM_001352570:13 NM_001352571:5 NM_001352573:6 NM_001352574:6 NM_001352575:6 NM_001352576:6 NM_001352581:6 NM_001352585:5 NM_001352586:5	616618	DKFZp434A2417 KIAA1996
ACBD6		616352	MGC2404
ACD		609377	Pip1 Tpp1 Tint1 Ptop
ACE		106180	ACE1 DCP1 CD143
ACER3		617036	APHC FLJ11238

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			PHCA
<i>ACHE</i>	NM_001367918:1-2 NM_001367919:1-2	100740	YT
<i>ACKR1</i>		613665	CCBP1 CD234 GPD DARC Dfy FY
<i>ACLY</i>		108728	ATPCL ACL CLATP
<i>ACMSD</i>		608889	
<i>ACO2</i>		100850	ACONM
<i>ACOX1</i>		609751	PALMCOX
<i>ACOX2</i>		601641	BRCACOX BRCOX THCCox
<i>ACP2</i>	NM_001610:2-11 NM_001302489.1:all NM_001302490:2-10 NM_001302491:2-9 NM_001302492.1:all NM_001357016:2-11	171650	LAP
<i>ACP4</i>		606362	ACPT
<i>ACP5</i>		171640	TRAcP HPAP TRAP
<i>ACP6</i>		611471	ACPL1 LPAP
<i>ACSF3</i>		614245	
<i>ACSL4</i>		300157	MRX63 LACS4 FACL4 ACS4 MRX68
<i>ACSL6</i>		604443	KIAA0837 LACS5 LACS2 FACL6 ACS2
<i>ACSS2</i>		605832	dJ1161H23.1 ACAS2 AceCS ACSA ACS
<i>ACTA1</i>		102610	ACTA NEM3
<i>ACTA2</i>		102620	ACTSA
<i>ACTB</i>		102630	

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>ACTC1</i>		102540	CMD1R ACTC
<i>ACTG1</i>		102560	ACTG DFNA20 DFNA26
<i>ACTG2</i>		102545	ACTA3 ACTSG ACTL3
<i>ACTN1</i>		102575	
<i>ACTN2</i>		102573	
<i>ACTN4</i>		604638	FSGS1
<i>ACVR1</i>		102576	SKR1 ACVRLK2 ALK2 ACVR1A
<i>ACVR1B</i>		601300	ALK4 SKR2 ACVRLK4 ActRIB
<i>ACVR2B</i>		602730	ActR-IIIB
<i>ACVRL1</i>		601284	HHT2 ORW2 ALK1 HHT ACVRLK1
<i>ACY1</i>		104620	
<i>ADA</i>		608958	ADA1
<i>ADA2</i>		607575	IDGFL ADGF CECR1
<i>ADAM10</i>		602192	CD156C MADM kuz HsT18717
<i>ADAM17</i>		603639	TACE cSVP CD156B
<i>ADAM22</i>	NM_001391975:3,30 NM_001391976:30 NM_001391977:29 NM_001391978:29 NM_001391980:3 NM_001391982:3	603709	MDC2
<i>ADAM9</i>		602713	CORD9 Mltng MDC9 MCMP KIAA0021
<i>ADAMTS1</i>		605174	C3-C5 KIAA1346

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			METH1
<i>ADAMTS10</i>		608990	ADAM-TS10
<i>ADAMTS13</i>		604134	vWF-CP MGC118899 MGC118900 VWF-CP DKFZp434C2322 C9orf8 FLJ42993 TTP
<i>ADAMTS17</i>		607511	FLJ16363 FLJ32769
<i>ADAMTS18</i>		607512	ADAMTS21
<i>ADAMTS2</i>	NM_014244:1 NM_021599:1	604539	PCINP ADAMTS-3 NPI hPCPNI ADAM-TS2
<i>ADAMTSL2</i>	NM_014694:10-19 NM_001145320:10-19	612277	KIAA0605
<i>ADAMTSL4</i>		610113	TSRC1 DKFZP434K1772
<i>ADAR</i>	NM_001365045:1	146920	ADAR1 IFI4 G1P1
<i>ADAT3</i>		615302	TAD3
<i>ADCY1</i>		103072	DFNB44 AC1
<i>ADCY10</i>		605205	SAC HCA2 Sacy RP1-313L4.2 SACI
<i>ADCY5</i>	NM_001378259:17	600293	AC5
<i>ADCY6</i>		600294	AC6
<i>ADD1</i>		102680	
<i>ADD3</i>		601568	ADDL
<i>ADGRA3</i>	NM_145290:1	612303	FLJ38547 GPR125 PGR21
<i>ADGRE2</i>	NM_013447:3,6,8-9 NM_001271052:2,5,7-8	606100	CD312 EMR2
<i>ADGRG1</i>		604110	GPR56 TM7LN4 TM7XN1
<i>ADGRG2</i>		300572	TM7LN2 HE6 GPR64 EDDM6
<i>ADGRG6</i>		612243	GPR126

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			FLJ14937
<i>ADGRV1</i>		602851	DKFZp761P0710 USH2C FEB4 GPR98 KIAA0686 VLGR1 MASS1
<i>ADIPOQ</i>		605441	ACDC apM1 GBP28 ACRP30 adiponectin
<i>ADIPOR1</i>		607945	PAQR1 ACDCR1
<i>ADIPOR2</i>	NM_001375363:7	607946	ACDCR2 PAQR2
<i>ADK</i>		102750	AK
<i>ADNP</i>		611386	ADNP1 KIAA0784
<i>ADORA1</i>		102775	RDC7
<i>ADORA2A</i>		102776	RDC8 ADORA2
<i>ADRA1A</i>	NM_033303:3 NM_001322503:2	104221	ADRA1L1 ADRA1C
<i>ADRA2A</i>		104210	ADRAR ADRA2R ADRA2
<i>ADRA2B</i>		104260	ADRARL1 ADRA2RL1 ADRA2L1
<i>ADRA2C</i>		104250	ADRA2RL2 ADRA2L2 ADRARL2
<i>ADRB1</i>		109630	ADRB1R
<i>ADRB2</i>		109690	ADRB B2AR ADRB2R BAR
<i>ADRB3</i>		109691	
<i>ADSL</i>	NM_001363840:14	608222	
<i>ADSS1</i>		612498	ADSSL1 FLJ38602
<i>AEBP1</i>		602981	ACLP
<i>AFF2</i>		300806	FMR2 FRAXE
<i>AFF4</i>		604417	MCEF AF5Q31
<i>AFG3L2</i>		604581	SPAX5 SCA28

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<i>AFP</i>		104150	FETA HPAFP
<i>AGA</i>		613228	ASRG
<i>AGBL1</i>	NM_001386094:23	615496	FLJ32310 CCP4
<i>AGBL5</i>		615900	FLJ21839 CCP5
<i>AGER</i>		600214	sRAGE SCARJ1 RAGE
<i>AGK</i>	NM_001364948:15	610345	FLJ10842 MULK
<i>AGL</i>		610860	GDE
<i>AGMO</i>		613738	TMEM195 FLJ16237
<i>AGO1</i>		606228	hAGO1 EIF2C1
<i>AGPAT2</i>		603100	BSCL LPAAT-beta
<i>AGPS</i>		603051	ADPS ADHAPS ADAS ADAP-S ALDHPSY
<i>AGRN</i>	NM_001364727:1	103320	AGRIN
<i>AGRP</i>		602311	ASIP2 ART Agrt
<i>AGT</i>		106150	SERPINA8
<i>AGTR1</i>		106165	AGTR1B AT2R1 AGTR1A AG2S AT1B AT1 AT2R1A HAT1R AT2R1B
<i>AGTR2</i>		300034	MRX88 AT2
<i>AGXT</i>		604285	AGT SPAT PH1 AGXT1 TLH6 AGT1 Ser-PyrAT SPT
<i>AGXT2</i>		612471	AGT2
<i>AHCY</i>		180960	SAHH

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<i>AHDC1</i>		615790	DJ159A19.3 RP1-159A19.1
<i>AHI1</i>		608894	JBTS3 ORF1 FLJ20069
<i>AHSP</i>		605821	ERAF EDRF
<i>AICDA</i>		605257	CDA2 ARP2 AID HIGM2
<i>AIFM1</i>		300169	AIF DFNX5 AUNX1 PDCD8 CMTX4 NAMSD
<i>AIMP1</i>		603605	EMAP-2 p43 SCYE1 EMAPII
<i>AIP</i>		605555	XAP2 FKBP16 ARA9 FKBP37
<i>AIPL1</i>		604392	LCA4
<i>AIRE</i>		607358	APS1 PGA1 APECED
<i>AK1</i>		103000	
<i>AK2</i>		103020	
<i>AKAP10</i>		604694	D-AKAP2 PRKA10 MGC9414
<i>AKAP9</i>	NM_001379277:1	604001	HYPERION YOTIAO AKAP450 PPP1R45 LQT11 KIAA0803 MU-RMS-40.16A PRKA9 CG-NAP AKAP350
<i>AKR1B1</i>		103880	ALDR1 AR
<i>AKR1C2</i>	NM_001354:6,9-11 NM_001321027:6-8 NM_001393392:4,7-9 NM_205845:5,8-10	600450	HAKRD DDH2 TDD DD2

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			DD BABP MCDR2
<i>AKR1C4</i>		600451	C11 CHDR DD4 CDR HAKRA MGC22581 3-alpha-HSD
<i>AKR1D1</i>		604741	SRD5B1
<i>AKR1E2</i>		617451	HTSP1 htAKR AKR1CL2 MGC10612 AKRDC1
<i>AKT1</i>		164730	AKT PRKBA RAC-alpha PKB RAC
<i>AKT2</i>		164731	PKBβ
<i>AKT3</i>		611223	PKBG RAC-gamma PRKBG
<i>ALAD</i>		125270	ALADH PBGS
<i>ALAS1</i>		125290	ALAS3 ALAS
<i>ALAS2</i>		301300	ASB
<i>ALB</i>		103600	
<i>ALDH18A1</i>		138250	P5CS SPG9 PYCS GSAS
<i>ALDH1A2</i>		603687	RALDH2
<i>ALDH1A3</i>		600463	RALDH3 ALDH6
<i>ALDH1B1</i>		100670	ALDHX ALDH5
<i>ALDH1L1</i>		600249	FTHFD FDH 10-fTHF
<i>ALDH1L2</i>		613584	FLJ38508 mtFDH
<i>ALDH2</i>		100650	
<i>ALDH3A2</i>		609523	FALDH SLS ALDH10
<i>ALDH4A1</i>		606811	ALDH4

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			P5CDh
<i>ALDH5A1</i>		610045	SSADH SSDH
<i>ALDH6A1</i>		603178	MMSDH
<i>ALDH7A1</i>		107323	EPD PDE ATQ1
<i>ALDOA</i>		103850	
<i>ALDOB</i>		612724	
<i>ALG1</i>		605907	HMAT1 CDG1K HMT-1 Mat-1
<i>ALG10B</i>		603313	KCR1
<i>ALG11</i>		613666	CDG1P KIAA0266
<i>ALG12</i>		607144	CDG1G ECM39
<i>ALG13</i>		300776	CDG1S CXorf45 FLJ23018 TDRD13 MDS031 GLT28D1 YGL047W
<i>ALG14</i>		612866	MGC19780
<i>ALG2</i>		607905	FLJ14511 CDG1I NET38 CDGII hALPG2
<i>ALG3</i>		608750	NOT56L D16Ert36e CDGS4 Not56
<i>ALG6</i>		604566	
<i>ALG8</i>		608103	MGC2840
<i>ALG9</i>	NM_001352415:16 NM_001352416:16 NM_001352417:17 NM_001352419:16 NM_001352420:15 NM_001352421:15	606941	DIBD1
<i>ALK</i>		105590	ALK1 CD246
<i>ALMS1</i>		606844	KIAA0328
<i>ALOX12</i>		152391	12S-LOX
<i>ALOX12B</i>		603741	12R-LOX
<i>ALOXE3</i>		607206	eLOX3 E-LOX

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<i>ALPK3</i>		617608	KIAA1330 Midori MAK
<i>ALPL</i>		171760	HOPS TNAP TNSALP TNALP
<i>ALS2</i>		606352	ALS2CR6
<i>ALX1</i>		601527	CART1
<i>ALX3</i>		606014	FND
<i>ALX4</i>		605420	PFM2 PFM KIAA1788 FPP
<i>AMACR</i>		604489	P504S RACE
<i>AMBN</i>		601259	
<i>AMELX</i>		300391	AIH1 AMG
<i>AMER1</i>		300647	WTX FLJ39827 FAM123B RP11-403E24.2
<i>AMH</i>		600957	MIF MIS
<i>AMHR2</i>		600956	MISR1 MISR2
<i>AMN</i>		605799	amniotless
<i>AMPD1</i>		102770	MAD MADA
<i>AMPD2</i>		102771	SPG63
<i>AMPD3</i>		102772	
<i>AMT</i>		238310	GCST NKH
<i>ANAPC15</i>	NM_001330321.2:all NM_001278485.2:all NM_001278486.2:all NM_001278487.2:all NM_001278488.1:all NM_001278489.2:all NM_001278490.2:all NM_001278491.1:all NM_001278492.1:all NM_001278493.1:all NM_001278494.1:all NM_001393427.1:all NM_001393428.1:all NM_001393429.1:all NM_001393430.1:all NM_001393431.1:all	614717	DKFZP564M082 HSPC020 C11orf51 APC15

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	NM_001393432.1:all NM_001393433.1:all NM_001393434.1:all NM_001393435.1:all NM_001393436.1:all NM_001393437.1:all NM_001393438.1:all NM_001393439.1:all NM_001393440.1:all NM_001393441.1:all NM_001393442.1:all NM_001393443:3-5 NM_001393444:3-5 NM_001393445:3-5 NM_001393446.1:all NM_001393447.1:all NM_001393448.1:all NM_001393449.1:all NM_001393450.1:all NM_001393451.1:all NM_001393452.1:all NM_001393453.1:all NM_001393454.1:all NM_001393455.1:all NM_001393456.1:all NM_001393457.1:all NM_001393458.1:all NM_001393459.1:all NM_014042.3:all		
<i>ANG</i>		105850	RNASE5 RAA1
<i>ANGPT1</i>		601667	AGPT-1 KIAA0003 Ang1
<i>ANGPTL3</i>		604774	ANGPT5
<i>ANGPTL4</i>		605910	HFARP FIAF ARP4 NL2 pp1158 PGAR
<i>ANGPTL5</i>		607666	
<i>ANGPTL8</i>		616223	TD26 C19orf80 RIFL
<i>ANK1</i>		612641	ANK SPH1
<i>ANK2</i>	NM_001354225:25,46 NM_001354228:42,45 NM_001354230:1,25,46 NM_001354231:1,25,44	106410	FAP87 CFAP87 LQT4

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	NM_001354232:44		
	NM_001354235:25,44		
	NM_001354236:25,45		
	NM_001354237:1,25		
	NM_001354239:26,46		
	NM_001354240:1		
	NM_001354241:2		
	NM_001354242:1,25		
	NM_001354243:44		
	NM_001354244:26,45		
	NM_001354245:44		
	NM_001354246:25		
	NM_001354249:44		
	NM_001354252:26		
	NM_001354253:45		
	NM_001354254:26		
	NM_001354256:26		
	NM_001354257:44		
	NM_001354260:43		
	NM_001354261:3		
	NM_001354265:25		
	NM_001354269:1,23		
	NM_001354272:26		
	NM_001354273:23		
	NM_001354274:41		
	NM_001354278:1,24		
	NM_001354279:1		
	NM_001354280:1		
	NM_001354281:1		
	NM_001354282:1		
	NM_001386142:44		
	NM_001386143:44,47		
	NM_001386144:1,43		
	NM_001386146:41,44		
	NM_001386147:3,44		
	NM_001386148:1,25		
	NM_001386149:43		
	NM_001386150:41		
	NM_001386151:41		
	NM_001386152:1,25		
	NM_001386160:3,45		
	NM_001386161:26		
	NM_001386167:14,17		
	NM_001386174:1,24,46,49-50		
	NM_001386175:1,23,45,48-49		
	NM_001386186:1,25,46		
	NM_001386187:1		
ANK3		600465	
ANKH		605145	CPPDD ANK HANK

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			SLC62A1 CMDJ CCAL2
<i>ANKK1</i>		608774	X-kinase
<i>ANKLE2</i>		616062	LEMD7 Lem4 KIAA0692
<i>ANKRD1</i>		609599	CVARP ALRP MCARP C-193 CARP
<i>ANKRD11</i>	NM_013275:13 NM_001256182:14 NM_001256183:13	611192	T13 ANCO1 ANCO-1 LZ16
<i>ANKRD26</i>		610855	KIAA1074 THC2
<i>ANKRD6</i>		610583	KIAA0957
<i>ANKS1A</i>		608994	ANKS1 KIAA0229
<i>ANKS3</i>		617310	FLJ32767 KIAA1977 FLJ32345
<i>ANKS6</i>		615370	NPHP16 ANKRD14 SAMD6 FLJ36928
<i>ANLN</i>		616027	ANILLIN scra Scraps
<i>ANO10</i>		613726	TMEM16K MGC47890 FLJ10375 SCAR10
<i>ANO3</i>		610110	C11orf25 DYT23 TMEM16C GENX-3947
<i>ANO5</i>		608662	LGMD2L GDD1 TMEM16E
<i>ANO6</i>		608663	DKFZp313M0720 TMEM16F
<i>ANOS1</i>		300836	KAL1 ADMLX KALIG-1 KAL WFDC19
<i>ANTXR1</i>		606410	FLJ21776

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			FLJ10601 ATR TEM8
<i>ANTXR2</i>		608041	FLJ31074 CMG-2 CMG2
<i>AP1S1</i>		603531	AP19 CLAPS1 EKV3 WUGSC:H_DJ0747G18.2 SIGMA1A
<i>AP1S2</i>	NM_001368994:5 NM_001369007:5 NM_001369008:5	300629	MRX59 PGS MRXS5 SIGMA1B
<i>AP1S3</i>		615781	sigma1C
<i>AP2S1</i>		602242	CLAPS2 HHC3 FBH3 FBHOk
<i>AP3B1</i>		603401	ADTB3A HPS2
<i>AP3B2</i>	NM_001348440:5	602166	NAPTb
<i>AP3D1</i>		607246	ADTD
<i>AP4B1</i>		607245	SPG47 BETA-4
<i>AP4E1</i>		607244	SPG51 AP-4-EPSILON
<i>AP4M1</i>		602296	MU-ARP2 SPG50 MU-4
<i>AP4S1</i>		607243	CLA20 SPG52 AP47B
<i>AP5Z1</i>		613653	KIAA0415 SPG48 zeta
<i>APAF1</i>		602233	APAF-1 CED4
<i>APBA2</i>	NM_001353795:14 NM_001353796:1 NM_001353797:1	602712	LIN-10 X11L MINT2 HsT16821 D15S1518E MGC:14091
<i>APBB1</i>		602709	Fe65 RIR
<i>APBB3</i>		602711	FE65L2
<i>APC</i>	NM_001354896:12 NM_001354900:11	611731	DP2 DP3

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			DP2.5 PPP1R46
<i>APC2</i>		612034	APCL
<i>APCDD1</i>		607479	B7323
<i>APEX1</i>		107748	HAP1 REF1 APX APE APEX APE-1 APEN REF-1
<i>APH1A</i>		607629	CGI-78 APH-1A
<i>APH1B</i>		607630	PSFL DKFZp564D0372 APH-1B
<i>APOA1</i>		107680	
<i>APOA2</i>		107670	
<i>APOA4</i>		107690	
<i>APOA5</i>		606368	RAP3 APOA-V
<i>APOB</i>		107730	
<i>APOC1</i>		107710	
<i>APOC2</i>		608083	
<i>APOC3</i>		107720	Apo-CIII APOCIII Apo-C3 ApoC-III ApoC-3
<i>APOE</i>		107741	AD2
<i>APOL1</i>		603743	APOL
<i>APP</i>		104760	alpha-sAPP AD1
<i>APPL1</i>		604299	APPL
<i>APRT</i>		102600	
<i>APT</i>		606350	EOAHA AXA1 AOA FLJ20157 EAOH AOA1
<i>AQP1</i>		107776	CHIP28 CO
<i>AQP2</i>		107777	
<i>AQP3</i>		600170	GIL
<i>AQP4</i>		600308	hAQP4 MIWC AQP-4
<i>AQP5</i>		600442	

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>AQP7</i>		602974	AQP7L AQP9 AQPap
<i>AR</i>	NM_001348061:4 NM_001348063:4	313700	NR3C4 SMA1 SBMA AIS DHTR HUMARA
<i>ARCNI</i>		600820	COPD
<i>ARF1</i>		103180	
<i>ARFGEF2</i>		605371	BIG2
<i>ARG1</i>		608313	
<i>ARHGAP11A</i>	NM_014783:1-8 NM_001286479:5-8 NM_001286480:6-9 NM_199357:1-8	610589	KIAA0013
<i>ARHGAP24</i>		610586	FilGAP FLJ33877 DKFZP564B1162
<i>ARHGAP26</i>	NM_001349547:1	605370	GRAF KIAA0621 OPHN1L OPHN1L1
<i>ARHGAP29</i>		610496	PARG1
<i>ARHGAP31</i>		610911	CDGAP
<i>ARHGAP4</i>		300023	RhoGAP4 SrGAP4 KIAA0131 C1 p115
<i>ARHGAP6</i>		300118	rhoGAPX-1
<i>ARHGDIA</i>		601925	RHOGDI GDIA1
<i>ARHGEF10</i>		608136	Gef10 KIAA0294
<i>ARHGEF15</i>		608504	ARGEF15 Vsm-RhoGEF MGC44868 KIAA0915 FLJ13791
<i>ARHGEF28</i>		612790	RGNEF p190RhoGEF RIP2
<i>ARHGEF6</i>		300267	Cool2 Cool-2 aPix MRX46 KIAA0006 alpha-PIX

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			alphaPIX
<i>ARHGEF9</i>	NM_001353923:1	300429	KIAA0424 PEM-2
<i>ARID1A</i>		603024	B120 BAF250 BAF250a SMARCF1 P270 C10rf4 C1orf4
<i>ARID1B</i>		614556	DAN15 SMARCF2 KIAA1235 p250R BAF250b 6A3-5 ELD/OSA1
<i>ARID2</i>		609539	KIAA1557 DKFZp686G052 BAF200 SMARCF3 FLJ30619
<i>ARL13B</i>		608922	ARL2L1 JBTS8 DKFZp761H079
<i>ARL14EP</i>		612295	C11orf46 ARF7EP FLJ38968
<i>ARL2BP</i>		615407	RP66 BART1 BART
<i>ARL6</i>		608845	BBS3 RP55
<i>ARL6IP1</i>		607669	KIAA0069 ARMER AIP1 SPG61 ARL6IP
<i>ARL6IP6</i>	NM_001350068:1	616495	MGC33864
<i>ARMC5</i>		615549	FLJ13063
<i>ARMC9</i>		617612	ARM KIAA1868 KU-MEL-1 FLJ12584
<i>ARMS2</i>		611313	ARMD8 LOC387715
<i>ARNT2</i>		606036	KIAA0307 bHLHe1
<i>ARPC1B</i>		604223	p41-ARC ARC41

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			p40-ARC
<i>ARSA</i>		607574	
<i>ARSB</i>		611542	
<i>ARSI</i>		610009	FLJ16069 SPG66
<i>ARSL</i>		300180	ARSE CDPX CDPX1
<i>ARV1</i>		611647	
<i>ARX</i>		300382	ISSX MRX33 EIEE1 MRX32 MRXS1 MRX54 MRX43 CT121 MRX87 PRTS MRX76 MRX29 MRX36 MRX38
<i>ASAH1</i>		613468	FLJ21558 AC ACDase PHP32 ASAH
<i>ASB10</i>		615054	GLC1F
<i>ASCC1</i>	NM_001369085:1 NM_001369086:1 NM_001369099:1	614215	p50 Em:AC022392.3 ASC1p50 CGI-18
<i>ASCC3</i>		614217	HELIC1 dJ121G13.4 ASC1p200 RNAH dJ467N11.1
<i>ASCL1</i>		100790	HASH1 bHLHa46 ASH1
<i>ASGR1</i>		108360	CLEC4H1
<i>ASH1L</i>		607999	KMT2H ASH1L1 huASH1 ASH1
<i>ASL</i>		608310	ASAL
<i>ASMT</i>		300015	ASMTY HIOMTY HIOMT

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeq transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>ASNS</i>		108370	
<i>ASPA</i>		608034	ASP ACY2
<i>ASPH</i>		600582	JCTN CASQ2BP1 BAH HAAH
<i>ASPM</i>		605481	Calmbp1 ASP MCPH5 FLJ10549 FLJ10517
<i>ASPN</i>		608135	FLJ20129 PLAP-1 SLRR1C
<i>ASPRV1</i>		611765	FLJ25084 SASPase Taps
<i>ASPSCR1</i>		606236	UBXD9 ASPL ASPS UBXN9 TUG
<i>ASRGL1</i>		609212	ALP1 ALP FLJ22316
<i>ASS1</i>		603470	CTLN1 ASS
<i>ASTE1</i>	NM_001288950:3-4,6-7 NM_014065:3-4,6		HT001
<i>ASXL1</i>	NM_001363734:1	612990	KIAA0978
<i>ASXL2</i>		612991	ASXH2 FLJ10898 KIAA1685
<i>ASXL3</i>		615115	KIAA1713
<i>ATAD3A</i>	NM_001170535:3-4,11,13 NM_001170536:3-4,11,13 NM_018188:3-4,11,13	612316	FLJ10709
<i>ATAD5</i>		609534	FRAG1 C17orf41 ELG1 FLJ12735
<i>ATCAY</i>		608179	BNIP-H
<i>ATF3</i>		603148	
<i>ATF4</i>		604064	TAXREB67 CREB-2 TXREB
<i>ATF6</i>		605537	ATF6A
<i>ATG16L1</i>	NM_001363742:9	610767	WDR30 ATG16L

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			APG16L ATG16A FLJ10035
<i>ATG2B</i>		616226	BLTP4B C14orf103 FLJ10242
<i>ATG5</i>		604261	APG5L APG5 hAPG5 ASP
<i>ATG7</i>	NM_001349238:18	608760	APG7L GSA7 DKFZp434N0735
<i>ATIC</i>		601731	PURH IMPCHASE AICARFT
<i>ATL1</i>		606439	FSP1 AD-FSP SPG3A SPG3
<i>ATL3</i>		609369	DKFZP564J0863
<i>ATM</i>		607585	TEL1 ATDC ATA ATD ATC TELO1
<i>ATN1</i>		607462	D12S755E B37 DRPLA
<i>ATOH7</i>		609875	bHLHa13 Math5
<i>ATP11C</i>	NM_001353810:2 NM_001353811:1,29 NM_001353812:1	300516	ATPIQ ATPIG
<i>ATP13A2</i>		610513	HSA9947 CLN12 PARK9
<i>ATP1A1</i>		182310	
<i>ATP1A2</i>	NM_000702:9	182340	FHM2 MHP2
<i>ATP1A3</i>		182350	DYT12
<i>ATP2A1</i>		108730	ATP2A SERCA1
<i>ATP2A2</i>		108740	SERCA2 DAR ATP2B
<i>ATP2A3</i>		601929	SERCA3
<i>ATP2B2</i>		108733	PMCA2
<i>ATP2B3</i>	NM_001388362:22	300014	SCAX1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			CLA2 PMCA3 CFAP39
<i>ATP2B4</i>		108732	ATP2B2 PMCA4 MXRA1
<i>ATP2C1</i>		604384	SPCA1 KIAA1347 PMR1 ATP2C1A BCPM
<i>ATP4A</i>		137216	ATP6A
<i>ATP5F1A</i>		164360	hATP1 ATPM ATP5A1 ORM OMR ATP5A ATP5AL2
<i>ATP5F1E</i>	NM_006886:1	606153	ATP5E
<i>ATP6AP1</i>		300197	XAP3 ORF CF2 Ac45 XAP-3 VATPS1 16A ATP6IP1 ATP6S1
<i>ATP6AP2</i>		300556	APT6M8-9 ATP6IP2 RENR M8-9 ATP6M8-9 PRR
<i>ATP6V0A2</i>		611716	J6B7 Vph1 ATP6a2 TJ6 ATP6N1D a2V RTF Stv1 TJ6M TJ6s a2
<i>ATP6V0A4</i>		605239	VPP2 RDRTA2 Vph1 ATP6N1B RTA1C

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			a4 ATP6N2 Stv1 RTADR
<i>ATP6V0D2</i>		618072	VMA6 FLJ38708 ATP6D2
<i>ATP6V1B1</i>		192132	VATB VPP3 ATP6B1 Vma2 RTA1B
<i>ATP6V1B2</i>		606939	VPP3 VATB HO57 Vma2 ATP6B2
<i>ATP6V1E1</i>		108746	ATP6E2 ATP6E ATP6V1E P31 Vma4
<i>ATP7A</i>		300011	MNK
<i>ATP7B</i>		606882	WND
<i>ATP8A2</i>		605870	ATPIB ML-1
<i>ATP8B1</i>		602397	FIC1 PFIC1 BRIC PFIC ATPIC
<i>ATPAF2</i>		608918	Atp12p MGC29736 ATP12 LP3663
<i>ATR</i>		601215	FRP1 SCKL1 MEC1 SCKL
<i>ATRIP</i>		606605	MGC20625 FLJ12343 MGC21482 MGC26740
<i>ATRX</i>		300032	JMS MRX52 XH2 XNP RAD54
<i>ATXN1</i>		601556	SCA1 ATX1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			D6S504E
<i>ATXN10</i>		611150	SCA10 E46L ATX10 FLJ37990
<i>ATXN2</i>		601517	ATX2 SCA2 TNRC13
<i>ATXN3</i>		607047	ATX3 MJD SCA3 JOS
<i>ATXN7</i>	NM_001177387:2 NM_000333:3 NM_001377405:3 NM_001377406:2	607640	SCA7 OPCA3 SGF73 ADCAII
<i>AUH</i>		600529	
<i>AURKB</i>		604970	STK12 AIM-1 AurB IPL1 ARK2 Aik2 STK5 PPP1R48
<i>AURKC</i>	NM_001015879:1	603495	ARK3 STK13 AurC
<i>AUTS2</i>		607270	FBRSL2 KIAA0442
<i>AVP</i>		192340	ADH ARVP
<i>AVPR2</i>		300538	DIR3 V2R DIR
<i>AXDND1</i>	NM_144696:2-25		C1orf125 FLJ32940
<i>AXIN1</i>		603816	PPP1R49
<i>AXIN2</i>		604025	MGC126582 DKFZp781B0869
<i>AXL</i>		109135	Tyro7 ARK JTK11 UFO
<i>B2M</i>		109700	
<i>B3GALNT1</i>	NM_001349162:2-5 NM_001349163:2-5	603094	galT3 B3GALT3 B3GALANT1 GLOB beta3Gal-T3

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>B3GALNT2</i>	NM_001277155:2	610194	MGC39558
<i>B3GAT3</i>		606374	GlcAT-I
<i>B3GLCT</i>		610308	B3GTL B3Glc-T B3GALTL
<i>B3GNT2</i>		605581	B3GN-T1 B3GN-T2 B3GNT-2 BETA3GNT B3GNT1
<i>B4GALNT1</i>		601873	GALGT beta1-4GalNAc-T SPG26
<i>B4GALT1</i>	NM_001378497:3	137060	beta4Gal-T1 GGTB2
<i>B4GALT7</i>		604327	XGALT-1 beta4Gal-T7
<i>B4GAT1</i>		605517	iGAT B3GN-T1 B3GNT6 IGnT BETA3GNTI B3GNT1
<i>B9D1</i>		614144	B9 MKS9 MKSR-1 EPPB9
<i>B9D2</i>		611951	MKS10 MGC4093 MKSR-2
<i>BAAT</i>		602938	BAT
<i>BACE1</i>		604252	BACE
<i>BAG3</i>		603883	
<i>BANF1</i>		603811	BAF
<i>BAP1</i>		603089	UCLH2 hucep-6 KIAA0272
<i>BARD1</i>		601593	
<i>BAX</i>		600040	BCL2L4
<i>BAZ1A</i>		605680	ACF1 hACF1 WCRF180 WALp1
<i>BBIP1</i>		613605	BBS18 BBIP10 NCRNA00081 bA348N5.3
<i>BBS1</i>		209901	FLJ23590
<i>BBS10</i>		610148	FLJ23560 C12orf58

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>BBS12</i>		610683	FLJ41559 C4orf24 FLJ35630
<i>BBS2</i>		606151	BBS
<i>BBS4</i>		600374	
<i>BBS5</i>		603650	DKFZp762I194
<i>BBS7</i>		607590	BBS2L1 FLJ10715
<i>BBS9</i>	NM_001348041:23 NM_001362679:22	607968	B1 PTHB1
<i>BCAM</i>		612773	LU CD239
<i>BCAP31</i>		300398	BAP31 CDM DXS1357E 6C6-Ag
<i>BCAT2</i>		113530	BCATm BCT2 BCAM
<i>BCHE</i>		177400	CHE2 CHE1 E1
<i>BCKDHA</i>		608348	MSU OVD1A
<i>BCKDHB</i>		248611	
<i>BCKDK</i>		614901	
<i>BCL10</i>		603517	CIPER CLAP c-E10 CARMEN mE10
<i>BCL11A</i>		606557	BCL11A-S SMARCM1 CTIP1 BCL11A-L ZNF856 HBFQTL5 BCL11A-XL EVI9
<i>BCL11B</i>		606558	hRIT1-alpha CTIP2 CTIP-2 SMARCM2 ZNF856B
<i>BCL2</i>		151430	Bcl-2 PPP1R50
<i>BCL2L11</i>		603827	BOD BimEL BIM BimS

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			BimL
<i>BCL2L2-PABPN1</i>	NM_001387340:3-4 NM_001199864:3 NM_001387341:3-4 NM_001387342:3-4 NM_001387343:3-4 NM_001387344:3-4 NM_001387345:3 NM_001387346:3		
<i>BCL7A</i>		601406	SMARCB1 BCL7
<i>BCL9</i>		602597	
<i>BCL9L</i>		609004	Bcl9-2 DLNB11 B9L
<i>BCO1</i>		605748	BCDO BCDO1 BCMO BCMO1 FLJ10730
<i>BCOR</i>		300485	FLJ20285 KIAA1575
<i>BCORL1</i>		300688	FLJ11362 CXorf10
<i>BCR</i>	NM_004327:18 NM_021574:17	151410	CML ALL PHL D22S662 D22S11 BCR1
<i>BCS1L</i>		603647	Hs.6719 h-BCS BCS BJS
<i>BDNF</i>		113505	
<i>BDP1</i>		607012	KIAA1689 TFNR TFIIB150 HSA238520 TFIIB90 TAF3B1 KIAA1241 TFC5
<i>BEAN1</i>		612051	SCA31
<i>BEST1</i>		607854	RP50 BMD BEST VMD2
<i>BFSP1</i>		603307	CP115 filensin

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			LIFL-H CP94
<i>BFSP2</i>		603212	CP49 phakinin LIFL-L CP47
<i>BGN</i>		301870	SLRR1A DSPG1
<i>BHLHA9</i>		615416	BHLHF42
<i>BHLHE41</i>		606200	BHLHB3 SHARP-1 DEC2 SHARP1
<i>BICC1</i>		614295	
<i>BICD2</i>		609797	KIAA0699
<i>BIN1</i>		601248	AMPH2 SH3P9 AMPHL
<i>BIVM-ERCC5</i>	NM_001204425:1-9		
<i>BLK</i>		191305	MGC10442
<i>BLM</i>		604610	RECQL3 RECQ2 BS
<i>BLMH</i>		602403	BH
<i>BLNK</i>		604515	bca Ly57 SLP-65 SLP65 BLNK-s BASH
<i>BLOC1S3</i>		609762	HPS8 BLOS3
<i>BLOC1S6</i>		604310	PA HPS9 PLDN
<i>BLVRA</i>		109750	BLVR
<i>BMP1</i>		112264	BMP-1 PCOLC
<i>BMP15</i>		300247	GDF9B
<i>BMP2</i>		112261	BMP2A
<i>BMP4</i>	NM_001347912:1-2	112262	BMP2B
<i>BMP6</i>		112266	VGR VGR1
<i>BMP7</i>		112267	OP-1
<i>BMPER</i>		608699	Cv2 CRIM3
<i>BMPR1A</i>	NM_004329:12-13	601299	ACVRLK3 ALK3 CD292
<i>BMPR1B</i>		603248	CDw293

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			ALK6
<i>BMPR2</i>		600799	BMPR3 PPH1 BRK-3 T-ALK BMPR-II
<i>BMS1</i>	NM_014753:5	611448	KIAA0187 BMS1L
<i>BNC2</i>		608669	BSN2 FLJ20043
<i>BOD1</i>		616745	FAM44B
<i>BOLA3</i>		613183	
<i>BPGM</i>		613896	
<i>BPNT2</i>		614010	IMPA3 IMPAD1 FLJ20421 gPAPP
<i>BPTF</i>		601819	FAC1 FALZ NURF301
<i>BRAF</i>	NM_001354609:19 NM_001374244:10 NM_001374258:10,20 NM_001378467:19 NM_001378468:18 NM_001378470:18 NM_001378471:18 NM_001378472:19 NM_001378474:18 NM_001378475:18	164757	BRAF1 BRAF-1
<i>BRAT1</i>		614506	BAAT1 C7orf27 MGC22916
<i>BRCA1</i>		113705	RNF53 BRCC1 PPP1R53 FANCS
<i>BRCA2</i>		600185	FANCD XRCC11 BRCC2 FAD1 FAD FACD FANCD1
<i>BRCC3</i>		300617	CXorf53 BRCC36 C6.1A
<i>BRD2</i>		601540	NAT BRD2-IT1 FSRG1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			RING3 D6S113E KIAA9001
<i>BRF1</i>		604902	BRF TAF3C GTF3B TFIIIB90 hBRF TAF3B2
<i>BRIP1</i>		605882	FANCF OF BACH1
<i>BRPF1</i>		602410	BR140
<i>BRWD3</i>		300553	FLJ38568 MRX93
<i>BSCL2</i>		606158	GNG3LG SPG17 seipin
<i>BSND</i>		606412	DFNB73 BART
<i>BTBD9</i>		611237	KIAA1880 dJ322112.1
<i>BTBD</i>	NM_001370752:5 NM_001370753:4	609019	
<i>BTG2</i>		601597	TIS21 APRO1 MGC126064 MGC126063 PC3
<i>BTK</i>		300300	ATK XLA AGMX1 IMD1 PSCTK1
<i>BUB1</i>		602452	BUB1A BUB1L hBUB1
<i>BUB1B</i>		602860	BUBR1 Bub1A MAD3L SSK1
<i>BUB3</i>		603719	BUB3L
<i>BVES</i>		604577	POPODC1 HBVES POP1
<i>C11orf65</i>	NM_001351110:8		MFI MGC33948
<i>C12orf4</i>		616082	
<i>C12orf57</i>		615140	C10 GRCC10

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>C19orf12</i>		614297	MPAN SPG43 NBIA4 MGC10922 DKFZP762D096
<i>C1GALT1C1</i>		300611	COSMC C1GALT2
<i>C1QA</i>		120550	
<i>C1QB</i>		120570	
<i>C1QBP</i>		601269	HABP1 gC1qR SF2p32 p32 gC1Q-R
<i>C1QC</i>		120575	C1QG
<i>C1QTNF5</i>		608752	CTRP5 DKFZp586B0621 LORD
<i>C1R</i>	NM_001354346:1	613785	
<i>C1S</i>		120580	
<i>C2</i>		613927	
<i>C2CD3</i>		615944	DKFZP586P0123
<i>C3</i>		120700	CPAMD1 C3b ARMD9 C3a
<i>C3AR1</i>		605246	C3AR AZ3B
<i>C4BPA</i>		120830	C4BP
<i>C4BPB</i>		120831	C4BP
<i>C5</i>		120900	C5a CPAMD4 C5b
<i>C5AR1</i>		113995	C5AR CD88 C5R1 C5A
<i>C5AR2</i>		609949	GPR77 C5L2
<i>C6</i>		217050	
<i>C7</i>		217070	
<i>C8A</i>		120950	
<i>C8B</i>		120960	
<i>C8G</i>		120930	
<i>C8orf34</i>			vest-1 VEST1
<i>C9</i>		120940	
<i>C9orf72</i>		614260	MGC23980 DENND9 DENNL72

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
CA1		114800	Car1
CA12		603263	HsT18816
CA2		611492	CA-II Car2 CAII
CA4		114760	CAIV Car4 RP17
CA5A	NM_001367225:7	114761	CAV CA5 CAVA
CA8		114815	CALS CARP
CAB39		612174	MO25 CGI-66
CABIN1		604251	PPP3IN KIAA0330
CABP2		607314	DFNB93
CABP4		608965	CSNB2B
CACNA1A		601011	APCA MHP SCA6 HPCA EA2 FHM MHP1 Cav2.1 CACNL1A4
CACNA1B	NM_000718:1 NM_001243812:1	601012	Cav2.2 CACNN CACNL1A5
CACNA1C		114205	CCHL1A1 CACNL1A1 CACH2 CACN2 Cav1.2 TS LQT8
CACNA1D		114206	CACH3 CCHL1A2 Cav1.3 CACNL1A2 CACN4
CACNA1E		601013	CACNL1A6 Cav2.3 CACH6 BII
CACNA1F		300110	CSNBX2 JMC8 OA2

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			AIED CSNB2 Cav1.4 CORDX3 CSNB2A JM8
<i>CACNA1G</i>		604065	Cav3.1 NBR13
<i>CACNA1H</i>		607904	Cav3.2
<i>CACNA1S</i>		114208	hypoPP MHS5 HOKPP Cav1.1 CACNL1A3
<i>CACNA2D1</i>	NM_001366867:19	114204	lncRNA-N3 MHS3 CACNL2A alpha2delta-1 CACNA2 LINC01112
<i>CACNA2D2</i>		607082	KIAA0558 alpha2delta-2
<i>CACNA2D4</i>		608171	alpha2delta-4
<i>CACNB2</i>		600003	MYSB CACNLB2
<i>CACNB4</i>		601949	EJM4
<i>CACNG2</i>		602911	stargazin MGC138504 MGC138502
<i>CAD</i>		114010	GATD4
<i>CADM1</i>		605686	ST17 NECL2 SYNCAM IGSF4 RA175 BL2 TSLC1 IGSF4A Nec1-2 SYNCAM1
<i>CADPS2</i>		609978	CAPS2
<i>CALCOCO2</i>		604587	NDP52 MGC17318
<i>CALHM1</i>		612234	FAM26C
<i>CALM1</i>	NM_001363670:1	114180	CAMI PHKD1 CALML2 DD132 PHKD
<i>CALM2</i>		114182	PHKD2

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			PHKD CAMII
<i>CALM3</i>		114183	PHKD PHKD3
<i>CALR</i>		109091	cC1qR FLJ26680 RO CRT SSA
<i>CALR3</i>		611414	FLJ25355 CT93 CRT2 MGC26577
<i>CALU</i>		603420	
<i>CAMK1</i>	NM_003656:2,4-12	604998	CaMKI CaMKI-alpha
<i>CAMK2G</i>	NM_001367516:20 NM_001367526:18	602123	CAMKG
<i>CAMTA1</i>	NM_001349609:20 NM_001349610:20 NM_001349612:19 NM_001349613:1 NM_001349614:12 NM_001349615:10 NM_001349616:10 NM_001349619:10 NM_001349620:12 NM_001349621:12 NM_001349622:10 NM_001349627:2	611501	KIAA0833
<i>CANT1</i>		613165	SHAPY SCAN-1
<i>CAPN1</i>		114220	muCANP muCL CANP CANPL1
<i>CAPN10</i>		605286	
<i>CAPN3</i>		114240	LGMD2 LGMD2A nCL-1 p94 CANP3
<i>CAPN5</i>		602537	HTRA3 ADNIV VRNI nCL-3
<i>CARD11</i>		607210	BIMP3 CARMA1
<i>CARD14</i>		607211	PSORS2 BIMP2

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			CARMA2
<i>CARD8</i>	NM_001351786:5 NM_001351787:11	609051	NDPP CARDINAL Dakar KIAA0955 TUCAN
<i>CARD9</i>		607212	
<i>CARMIL2</i>		610859	RLTPR LRRC16C
<i>CARS2</i>	NM_001352253:9	612800	FLJ12118
<i>CARTPT</i>		602606	CART
<i>CASK</i>		300172	TNRC8 LIN2 FGS4 CAGH39
<i>CASP10</i>		601762	MCH4 FLICE-2
<i>CASP14</i>		605848	MGC119079 MICE MGC119078
<i>CASP2</i>		600639	ICH1 NEDD2 PPP1R57 MGC2181
<i>CASP7</i>		601761	CMH-1 ICE-LAP3 MCH3
<i>CASP8</i>	NM_001400645:6	601763	MCH5 FLICE MACH Casp-8
<i>CASQ1</i>		114250	PDIB1 CASQ
<i>CASQ2</i>		114251	PDIB2
<i>CASR</i>		601199	FHH HHC1 NSHPT HHC GPRC2A
<i>CAST</i>		114090	
<i>CAT</i>		115500	
<i>CATSPER1</i>		606389	CATSPER
<i>CAV1</i>		601047	CAV
<i>CAV3</i>		601253	LQT9 LGMD1C VIP21 VIP-21
<i>CAVIN1</i>		603198	CGL4 PTRF cavin-1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>CAVIN4</i>		617714	cavin-4 MURC
<i>CBL</i>		165360	CBL2 RNF55 c-Cbl
<i>CBLB</i>		604491	Cbl-b RNF56
<i>CBLC</i>		608453	RNF57 CBL-SL CBL-3
<i>CBLIF</i>		609342	GIF INF TCN3 IF IFMH
<i>CBR3</i>		603608	SDR21C2
<i>CBS</i>	NM_001321072:1	613381	HIP4
<i>CBX2</i>		602770	CDCA6 M33 MGC10561
<i>CC2D1A</i>		610055	Aki-1 MRT3 FLJ20241 Freud-1 Lgd2 TAPE
<i>CC2D2A</i>		612013	MKS6 JBTS9 KIAA1345
<i>CCBE1</i>		612753	FLJ30681 KIAA1983
<i>CCDC103</i>		614677	PR46b CILD17 FLJ34211 FLJ13094
<i>CCDC115</i>		613734	FLJ30131 MGC12981 ccp1
<i>CCDC141</i>		616031	FLJ39502 CAMDI
<i>CCDC169-SOHLH2</i>	NM_001198910:2-6		C13orf38-SOHLH2
<i>CCDC170</i>			FLJ23305 C6orf97 bA282P11.1
<i>CCDC174</i>		616735	C3orf19 FLJ33839 ctr1
<i>CCDC18</i>			NY-SAR-41
<i>CCDC22</i>		300859	JM1 CXorf37

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>CCDC28B</i>		610162	RP4-622L5.5 MGC1203
<i>CCDC39</i>		613798	FAP59 DKFZp434A128 CILD14 CFAP59
<i>CCDC40</i>		613799	FLJ20753 CFAP172 CILD15 FAP172 FLJ32021 KIAA1640
<i>CCDC50</i>		611051	C3orf6 Ymer DFNA44
<i>CCDC65</i>		611088	CILD27 CFAP250 FAP250 FLJ35732 NYD-SP28 DRC2
<i>CCDC78</i>		614666	C16orf25 FLJ34512
<i>CCDC8</i>		614145	DKFZp564K0322 3M3 PPP1R20
<i>CCDC88A</i>		609736	GRDN FLJ10392 HkRP1 APE GIV KIAA1212
<i>CCDC88C</i>		611204	SCA40 HkRP2 DAPLE KIAA1509
<i>CCHCR1</i>		605310	C6orf18 HCR
<i>CCL11</i>		601156	eotaxin MGC22554 SCYA11
<i>CCL2</i>		158105	MCP-1 GDCF-2 SMC-CF MCP1 MGC9434 MCAF HC11 SCYA2
<i>CCL4</i>		182284	Act-2

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			MIP-1-beta LAG1 SCYA4 AT744.1
<i>CCM2</i>	NM_001363458:7 NM_001363459:6	607929	MGC4607 C7orf22 OSM
<i>CCN1</i>		602369	GIG1 IGFBP10 CYR61
<i>CCN2</i>		121009	CTGF IGFBP8
<i>CCN6</i>		603400	WISP-3 WISP3
<i>CCNA2</i>		123835	CCN1 CCNA
<i>CCND1</i>		168461	PRAD1 D11S287E BCL1 U21B31
<i>CCND2</i>		123833	
<i>CCNF</i>		600227	FBX1 FBX01
<i>CCNO</i>		607752	FLJ22422 CCNU UNG2 UDG2
<i>CCNQ</i>		300708	FAM58A CycM
<i>CCR1</i>		601159	CD191 SCYAR1 MIP1aR CKR-1 CMKBR1
<i>CCS</i>		603864	
<i>CCT2</i>		605139	Cctb
<i>CCT5</i>		610150	KIAA0098
<i>CCT7</i>		605140	Nip7-1 Ccth
<i>CD109</i>		608859	CPAMD7 DKFZp762L1111 FLJ38569
<i>CD151</i>		602243	RAPH TSPAN24 SFA-1 PETA-3
<i>CD164</i>		603356	MUC-24 DFNA66 MGC-24
<i>CD177</i>	NM_020406:4-9	162860	HNA2A

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			NB1 PRV1
<i>CD19</i>		107265	
<i>CD2</i>		186990	SRBC
<i>CD207</i>		604862	CLEC4K Langerin
<i>CD247</i>	NM_001378515:2 NM_001378516:2	186780	CD3H CD3Q CD3Z
<i>CD27</i>		186711	Tp55 S152 TNFRSF7
<i>CD2AP</i>		604241	CMS
<i>CD320</i>		606475	TCbIR 8D6 8D6A
<i>CD33</i>		159590	SIGLEC3 SIGLEC-3 FLJ00391 p67
<i>CD36</i>		173510	SCARB3 FAT GPIV GP4 GP3B
<i>CD3D</i>		186790	CD3DELTA T3D CD3-DELTA
<i>CD3E</i>		186830	CD3epsilon CD3-epsilon
<i>CD3G</i>		186740	CD3GAMMA CD3-GAMMA
<i>CD4</i>		186940	
<i>CD40</i>		109535	Bp50 TNFRSF5 p50
<i>CD40LG</i>		300386	TNFSF5 hCD40L gp39 IMD3 CD154 CD40L TRAP HIGM1
<i>CD46</i>		120920	MIC10 TLX MCP MGC26544 TRA2.10
<i>CD55</i>		125240	DAF

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			CR TC CROM
<i>CD59</i>		107271	MIN2 p18-20 MIN1 MSK21 EL32 G344 EJ30 MIC11 MIN3 16.3A5 EJ16
<i>CD70</i>		602840	CD27L CD27LG TNFSF7
<i>CD79A</i>		112205	MB-1 IGA IGAAlpha Ig-alpha MB1
<i>CD79B</i>		147245	Igbeta B29 Ig-beta IGB
<i>CD81</i>		186845	TSPAN28 TAPA1 TAPA-1
<i>CD8A</i>		186910	CD8
<i>CD93</i>		120577	C1QR1 C1qRP MXRA4 C1qR(P) CDw93 ECSM3 dJ737E23.1
<i>CD96</i>		606037	TACTILE
<i>CDA</i>		123920	CDD
<i>CDAN1</i>		607465	CDAI CDA-I
<i>CDC14A</i>		603504	cdc14 Cdc14A2 DFNB32 DFNB105 Cdc14A1
<i>CDC42</i>	NM_001791:4-6 NM_001039802:5-7 NM_044472:4-6	116952	CDC42Hs G25K
<i>CDC45</i>	NM_001369291:1	603465	CDC45L

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			CDC45L2
<i>CDC5L</i>		602868	PCDC5RP CDC5 CEF1 hCDC5
<i>CDC6</i>		602627	CDC18L
<i>CDC73</i>		607393	FIHP C1orf28 HRPT2 HRPT1 parafibromin
<i>CDCA3</i>	NM_031299.7:all NM_001297602.3:all NM_001297603.2-4 NM_001297604.3:all NM_001331019.2:all	607749	GRCC8 TOME-1
<i>CDCA7</i>		609937	FLJ14736 JPO1
<i>CDCA7L</i>		609685	R1 JPO2 RAM2
<i>CDH1</i>		192090	CD324 UVO uvomorulin
<i>CDH11</i>		600023	CAD11 OB
<i>CDH13</i>		601364	CDHH
<i>CDH15</i>		114019	CDH14 CDH3
<i>CDH16</i>		603118	
<i>CDH2</i>		114020	CD325 NCAD CDHN
<i>CDH23</i>		605516	DFNB12 USH1D CDHR23
<i>CDH3</i>		114021	CDHP PCAD
<i>CDHR1</i>		609502	RP65 CORD15 PCDH21 KIAA1775
<i>CDIN1</i>		615626	MGC11326 FLJ22851 HH114 C15orf41
<i>CDK13</i>		603309	CDC2L5 CDC2L KIAA1791 CHED

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>CDK16</i>		311550	PCTGAIRE PCTK1 PCTAIRE1 FLJ16665 PCTAIRE
<i>CDK4</i>		123829	PSK-J3
<i>CDK5</i>		123831	PSSALRE
<i>CDK5R1</i>		603460	p35nck5a Nck5a p35
<i>CDK5RAP2</i>		608201	C48 FLJ10867 MCPH3 CEP215
<i>CDK6</i>		603368	PLSTIRE
<i>CDKL5</i>		300203	EIEE2 CFAP247 STK9
<i>CDKN1A</i>	NM_001374510:1 NM_001374512:3	116899	p21 WAF1 P21 CAP20 CDKN1 p21Cip1/Waf1 p21CIP1 CIP1 SDI1
<i>CDKN1B</i>		600778	P27KIP1 KIP1
<i>CDKN1C</i>	NM_001362475:4	600856	BWS BWCR KIP2 P57
<i>CDKN2A</i>		600160	p14 p19 CDK4I p16 ARF INK4 MTS1 p16INK4a p19Arf CDKN2 INK4a CMM2 MLM p14ARF
<i>CDKN2B</i>		600431	TP15 MTS2 CDK4I

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			INK4B p15INK4b P15
<i>CDKN2C</i>		603369	INK4C p18
<i>CDON</i>		608707	CDO lhog ORCAM CDON1
<i>CDSN</i>		602593	D6S586E
<i>CDT1</i>		605525	DUP RIS2
<i>CDX1</i>		600746	
<i>CEACAM16</i>		614591	DFNA4B
<i>CEBPA</i>		116897	CEBP C/EBP-alpha
<i>CEBPE</i>		600749	CRP1
<i>CEBPG</i>		138972	IG/EBP-1 GPE1BP
<i>CEL</i>	NM_001807:1,8-9,11	114840	BSSL MODY8
<i>CELSR1</i>	NM_001378328:35	604523	ADGRC1 HFMI2 FMI2 CDHF9 ME2
<i>CELSR2</i>		604265	ADGRC2 KIAA0279 MEGF3 Flamingo1 EGFL2 CDHF10
<i>CELSR3</i>		604264	MEGF2 HFMI1 ADGRC3 CDHF11 FMI1 EGFL1
<i>CEMIP</i>		608366	KIAA1199 TMEM2L HYBID IR2155535
<i>CENPE</i>		117143	KIF10 PPP1R61
<i>CENPF</i>		600236	hcp-1
<i>CENPJ</i>		609279	LIP1 SASS4 LAP SCKL4 CPAP

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			Sas-4 BM032 MCPH6
<i>CEP104</i>		616690	GlyBP RP1-286D6.4 ROC22 CFAP256 KIAA0562 JBTS25
<i>CEP120</i>		613446	CCDC100 FLJ36090
<i>CEP135</i>		611423	KIAA0635 FLJ13621 CEP4
<i>CEP152</i>		613529	MCPH9 KIAA0912 SCKL5
<i>CEP164</i>		614848	NPHP15 KIAA1052
<i>CEP19</i>	NM_001379468:1	615586	MGC14126 C3orf34
<i>CEP250</i>		609689	C-NAP1 CEP2
<i>CEP290</i>		610142	JBTS5 BBS14 POC3 KIAA0373 FLJ13615 rd16 MKS4 CT87 3H11Ag LCA10 NPHP6 SLSN6
<i>CEP41</i>		610523	JBTS15 FLJ22445 DKFZp762H1311 TSGA14
<i>CEP57</i>		607951	Translokin KIAA0092 TSP57
<i>CEP63</i>	NM_001353118:1	614724	FLJ13386
<i>CEP78</i>		617110	C9orf81 FLJ12643
<i>CEP83</i>		615847	CCDC41 NY-REN-58 NPHP18
<i>CER1</i>		603777	DAND4
<i>CERKL</i>		608381	RP26

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>CERS1</i>	NM_021267:1 NM_001387439:1,7 NM_001387440:1 NM_001387441:1 NM_001387442:7 NM_001387443:7 NM_198207:1	606919	LAG1 UOG1 LASS1
<i>CERS3</i>		615276	MGC27091 LASS3
<i>CERT1</i>	NM_001379004:16	604677	STARD11 GPBP COL4A3BP CERT
<i>CES1</i>	NM_001025194:12-14 NM_001025195:12-14 NM_001266:12-14	114835	CES1A1 HMSE1 SES1 CES2 CES1A2 CEH HMSE
<i>CETP</i>		118470	BPIFF
<i>CFAP298</i>		615494	Kur C21orf48 DNAAF16 FBB18 C21orf59 CILD26 FLJ20467
<i>CFAP298-TCP10L</i>	NM_001350338:6-8		C21orf77 FLJ10932 LINC00846
<i>CFAP410</i>		603191	LRRC76 YF5 A2 C21orf2
<i>CFAP418</i>		614477	BBS21 RP64 FAP418 CORD16 FLJ30600 MOT25 C8orf37
<i>CFAP53</i>		614759	CCDC11 FLJ32743
<i>CFB</i>		138470	BF H2-Bf BFD
<i>CFD</i>		134350	PFD ADN DF

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>CFH</i>		134370	HF2 ARMS1 HF1 ARMD4 HUS FHL1 HF
<i>CFHR1</i>	NM_002113:1 NM_001379306:1 NM_001379307:1 NM_001379308:1 NM_001379309:1 NM_001379310:1 NM_001379311:1 NM_001379312:1	134371	FHR1 CFHL CFHL1 H36-2 HFL2 CFHL1P HFL1 H36-1 CFHR1P
<i>CFHR2</i>	NM_005666:1 NM_001312672:1	600889	HFL3 FHR2 CFHL2
<i>CFHR3</i>	NM_021023:5 NM_001166624:4	605336	DOWN16 FHR3 CFHL3 FHR-3 HLF4
<i>CFHR4</i>	NM_001201550:9 NM_001201551:9 NM_006684:5	605337	FHR4 FHR-4 CFHL4
<i>CFHR5</i>		608593	FHR-5 CFHL5 FHR5
<i>CFI</i>	NM_001375278:14-15 NM_001375279:13-14 NM_001375280:12-13 NM_001375281:13 NM_001375282:12	217030	KAF C3b-INa IF FI
<i>CFL2</i>		601443	NEM7
<i>CFP</i>		300383	PFC
<i>CFTR</i>		602421	dJ760C5.1 ABC35 CF CFTR/MRP MRP7 TNR-CFTR ABCC7
<i>CH25H</i>		604551	
<i>CHAF1B</i>		601245	CAF1A MPP7 CAF-1 MPHOSPH7 CAF1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			CAF1P60
<i>CHAMP1</i>		616327	ZNF828 CAMP CHAMP C13orf8
<i>CHAT</i>		118490	
<i>CHCHD10</i>		615903	C22orf16 MIX17A N27C7-4
<i>CHCHD2</i>		616244	C7orf17 MIX17B MNRR1
<i>CHD1L</i>		613039	ALC1
<i>CHD2</i>		602119	DKFZp781D1727 DKFZp547I1315 FLJ38614 DKFZp686E01200
<i>CHD4</i>		603277	Mi2-BETA Mi-2b
<i>CHD7</i>		608892	FLJ20357 KIAA1416 FLJ20361 CRG
<i>CHD8</i>		610528	DUPLIN HELSNF1 KIAA1564
<i>CHEK2</i>	NM_001005735:3 NM_001349956:4	604373	CDS1 PP1425 bA444G7 HuCds1 RAD53 CHK2
<i>CHGB</i>		118920	SCG1 Sgl
<i>CHIT1</i>		600031	CHIT CHI3
<i>CHKB</i>		612395	CHETK CHKL
<i>CHM</i>	NM_001145414:5	300390	TCD REP-1 DXS540
<i>CHMP1A</i>		164010	Vps46A PRSM1 KIAA0047 PCOLN3 CHMP1
<i>CHMP2B</i>		609512	DKFZP564O123 VPS2B CHMP2.5
<i>CHMP4B</i>		610897	Shax1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			C20orf178 dJ553F4.4 VPS32B SNF7-2
<i>CHN1</i>	NM_001371514:4	118423	CHN ARHGAP2 DURS2 RhoGAP2 n-chimerin
<i>CHPT1</i>	NM_020244:1-8	616747	CPT1
<i>CHRD1</i>		300350	NRLN1 CHL MGC1
<i>CHRM2</i>		118493	
<i>CHRM3</i>		118494	
<i>CHRNA1</i>		100690	CHRNA
<i>CHRNA2</i>		118502	
<i>CHRNA3</i>		118503	
<i>CHRNA4</i>		118504	BFNC EBN EBN1
<i>CHRNA5</i>	NM_000745:1-5 NM_001307945:1-5 NM_001395171:1-5 NM_001395172:1-5 NM_001395173:1-5 NM_001395174:1-5 NM_001395175:1-5	118505	
<i>CHRNA7</i>	NM_000746:5-10 NM_001190455:5-10	118511	
<i>CHRN1</i>		100710	CHRN1
<i>CHRN2</i>		118507	
<i>CHRD</i>		100720	ACHRD
<i>CHRE</i>		100725	ACHRE
<i>CHRG</i>		100730	ACHRG
<i>CHST14</i>		608429	D4ST1 HD4ST D4ST-1
<i>CHST3</i>		603799	C6ST1 C6ST
<i>CHST6</i>		605294	MCDC1
<i>CHST8</i>		610190	GALNAC4ST-1
<i>CHSY1</i>		608183	KIAA0990 CSS1
<i>CHUK</i>		600664	IkbKA TCF16 NFKBKA IKKA IKK1 IKK-alpha

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>CIAO1</i>		604333	WDR39 CIA1
<i>CIB2</i>		605564	KIP2 DFNB48 USH1J
<i>CIC</i>		612082	KIAA0306
<i>CIDEC</i>		612120	FLJ20871 CIDE-3 Fsp27
<i>CIITA</i>		600005	NLRA MHC2TA C2TA
<i>CILK1</i>		612325	KIAA0936 MRK LCK2 ICK MGC46090
<i>CISD2</i>		611507	NAF-1 WFS2 Miner1 ERIS ZCD2
<i>CIT</i>		605629	CRIK CITK STK21 KIAA0949
<i>CITED2</i>		602937	MRG1
<i>CIZ1</i>		611420	LSFR1 ZNF356
<i>CKAP2L</i>		616174	radmis FLJ40629
<i>CKM</i>		123310	CKMM
<i>CKMT2</i>		123295	SMTCK
<i>CLCA2</i>		604003	CLCRG2
<i>CLCF1</i>		607672	NNT1 BSF3 NNT-1 NR6 CLC BSF-3 CISS2
<i>CLCN1</i>		118425	CIC-1 CLC1
<i>CLCN2</i>		600570	CIC-2 EJM6 CLC2
<i>CLCN4</i>		302910	CIC-4 CLC4
<i>CLCN5</i>		300008	XLRH hCIC-K2

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			CLC5 DENTS hCIC-K2 NPHL2 NPHL1 XRN CIC-5
<i>CLCN7</i>		602727	CLC-7 CIC-7 PPP1R63 CLC7 OPTA2
<i>CLCNKA</i>	NM_004070:9 NM_001042704:9 NM_001257139:8	602024	hCIC-Ka
<i>CLCNKB</i>	NM_000085:9 NM_001165945:2	602023	hCIC-Kb
<i>CLDN1</i>		603718	ILVASC SEMP1
<i>CLDN14</i>		605608	DFNB29
<i>CLDN16</i>		603959	HOMG3 PCLN1
<i>CLDN19</i>		610036	
<i>CLEC16A</i>		611303	Gop-1 KIAA0350
<i>CLEC4C</i>		606677	HECL DLEC CD303 BDCA2 CLECSF11 CLECSF7
<i>CLEC7A</i>		606264	SCARE2 CLECSF12 CD369 hDectin-1 DECTIN-1
<i>CLHC1</i>			FLJ31438 C2orf63
<i>CLIC2</i>		300138	XAP121 CLCNL2
<i>CLIC5</i>		607293	DFNB102
<i>CLIP1</i>	NM_001389291:16	179838	CYLN1 RSN CLIP170 CLIP-170 CLIP
<i>CLMP</i>		611693	FLJ22415 ASAM ACAM
<i>CLN3</i>		607042	JNCL

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			BTN1
			BTS
<i>CLN5</i>	NM_001366624:4	608102	
<i>CLN6</i>		606725	ncIf FLJ20561 HsT18960
<i>CLN8</i>		607837	TLCD6 FLJ39417 C8orf61 EPMR
<i>CLP1</i>		608757	HEAB hClp1
<i>CLPB</i>		616254	HSP78 ANKCLB SKD3 FLJ13152
<i>CLPP</i>		601119	
<i>CLRN1</i>		606397	USH3 RP61 USH3A
<i>CLSTN1</i>	NM_001009566:1 NM_001302883:1 NM_014944:1	611321	KIAA0911 CSTN1 CDHR12
<i>CLTC</i>		118955	Hc CLTCL2
<i>CLU</i>		185430	SP-40 CLI TRPM-2 KUB1 CLU2 SGP-2 APOJ CLU1
<i>CLUAP1</i>		616787	FAP22 CFAP22 KIAA0643 FLJ13297 IFT38
<i>CMYA5</i>		612193	SPRYD2 DKFZp451G223 TRIM76 C5orf10
<i>CNBP</i>		116955	ZCCHC22 DM2 ZNF9 RNF163 CNBP1
<i>CNGA1</i>		123825	RCNC1 CNCG RP49

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			CNG1 RCNCa CNCG1
<i>CNGA2</i>		300338	OCNCa OCNCALPHA CNCA1 CNCA CNG2 OCNCalpha OCNC1 FLJ46312
<i>CNGA3</i>		600053	ACHM2 CNCG3 CNG3 CCNCa CCNC1
<i>CNGB1</i>		600724	CNCG3L RCNCb CNGB1B GARP RCNC2 CNCG2 RP45 GAR1
<i>CNGB3</i>		605080	RMCH ACHM1 ACHM3
<i>CNKSR2</i>		300724	KIAA0902 KSR2 CNK2
<i>CNNM1</i>		607802	ACDP1
<i>CNNM2</i>		607803	ACDP2
<i>CNNM4</i>		607805	KIAA1592 ACDP4
<i>CNPY4</i>	NM_152755:2-6	610047	PRAT4B MGC40499
<i>CNR1</i>		114610	CNR CANN6 CB1K5 CB-R CB1A CB1
<i>CNTN1</i>		600016	F3 GP135
<i>CNTN2</i>		190197	AXT TAG-1 TAX1 TAX
<i>CNTN3</i>		601325	BIG-1 PANG

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>CNTN4</i>		607280	BIG-2
<i>CNTN6</i>		607220	NB-3
<i>CNTNAP1</i>		602346	CNTNAP Caspr NRXN4 p190
<i>CNTNAP2</i>		604569	NRXN4 Caspr2 KIAA0868
<i>CNTNAP5</i>		610519	caspr5 FLJ31966
<i>CNTROB</i>		611425	LIP8 PP1221
<i>COA3</i>		614775	HSPC009 MITRAC12 hCOA3 CCDC56 COX25
<i>COA5</i>		613920	C2orf64 Pet191 FLJ27524 MGC52110
<i>COA6</i>		614772	C1orf31
<i>COA8</i>		616003	C14orf153 MGC2562 APOP-1 APOPT1
<i>COASY</i>		609855	NBP DPCK PPAT
<i>COCH</i>		603196	DFNA31 DFNA9 COCH-5B2
<i>COG1</i>		606973	KIAA1381 LDLB
<i>COG2</i>		606974	LDLC
<i>COG4</i>		606976	DKFZP586E1519 COD1
<i>COG5</i>		606821	GOLTC1 GTC90
<i>COG6</i>		606977	KIAA1134 COD2
<i>COG7</i>		606978	
<i>COG8</i>	NM_001379261:5 NM_001379262:6 NM_001379265:5 NM_001379266:4	606979	FLJ22315 DOR1
<i>COL10A1</i>		120110	
<i>COL11A1</i>		120280	DFNA37 C011A1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			STL2 COLL6
COL11A2		120290	DFNB53 DFNA13 HKE5
COL12A1		120320	COL12A1L
COL13A1	NM_001368882:21 NM_001368883:20,36 NM_001368885:34 NM_001368886:35 NM_001368895:18 NM_001368896:32 NM_001368897:32	120350	
COL14A1	NM_001384947:48	120324	UND
COL17A1		113811	BP180 BPAG2
COL18A1		120328	KS KNO1 KNO
COL1A1		120150	OI4
COL1A2		120160	OI4
COL22A1		610026	
COL25A1		610004	
COL27A1		608461	KIAA1870 FLJ11895 MGC11337
COL2A1		120140	SEDC STL1 AOM
COL3A1		120180	EDS4A
COL4A1		120130	
COL4A2		120090	FLJ22259 DKFZp686l14213
COL4A2-AS2	NM_001267044:1-4		
COL4A3		120070	
COL4A4		120131	CA44
COL4A5		303630	ATS ASLN
COL4A6		303631	
COL5A1	NM_000093:1 NM_001278074:1	120215	
COL5A2		120190	
COL6A1		120220	
COL6A2		120240	
COL6A3		120250	
COL6A6		616613	
COL7A1		120120	EBD1 EBDCT EBR1
COL8A2		120252	FECD1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			PPCD FECD PPCD2
<i>COL9A1</i>	NM_001377289:19 NM_001377291:11	120210	
<i>COL9A2</i>		120260	MED EDM2
<i>COL9A3</i>		120270	DJ885L7.4.1 MED FLJ90759 EDM3 IDD
<i>COLEC11</i>		612502	MGC3279 CL-K1 CL-11
<i>COLQ</i>		603033	EAD
<i>COMP</i>		600310	MED EDM1 THBS5 EPD1 PSACH
<i>COMT</i>		116790	
<i>COPA</i>		601924	HEP-COP
<i>COQ2</i>		609825	FLJ26072 CL640
<i>COQ4</i>		612898	CGI-92
<i>COQ5</i>		616359	MGC4767
<i>COQ6</i>		614647	CGI-10
<i>COQ7</i>	NM_001370489:1 NM_001370491:1	601683	CAT5 CLK-1
<i>COQ8A</i>		606980	SCAR9 ADCK3 COQ8 CABC1
<i>COQ8B</i>		615567	FLJ12229 ADCK4 COQ8
<i>COQ9</i>		612837	C16orf49 DKFZP434K046
<i>CORIN</i>		605236	ATC2 TMPRSS10 Lrp4 CRN PRSC
<i>CORO1A</i>	NM_007074:10-11 NM_001193333:11-12	605000	HCORO1 coronin-1 p57
<i>CORO7-PAM16</i>	NM_001201479:1-27		
<i>COX10</i>	NM_001303:6	602125	
<i>COX14</i>		614478	C12orf62

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			MGC14288
COX15	NM_001372024:9	603646	CEMCOX2
COX20	NM_198076:3 NM_001312871:4 NM_001312872:4 NM_001312873:2 NM_001312874:3	614698	FLJ43269 FAM36A
COX4I2		607976	COX4B COXIV-2 COX4L2 dJ857M17.2 COX4-2
COX6A1		602072	COX6A COX6AL
COX6B1		124089	COX6B COXG
COX7B		300885	
COX8A		123870	VIII COX8 COX COX8L VIII-L COX8-2
CP		117700	AB073614
CPA1		114850	CPA
CPA6		609562	CPAH
CPAMD8	NM_015692:8,11	608841	VIP KIAA1283 K-CAP
CPB2		603101	CPU TAFI PCPB
CPLANE1	NM_001384732:41	614571	JBTS17 FLJ13231 Hug C5orf42
CPN1		603103	
CPOX		612732	HCP CPX CPO
CPS1	NM_001369256:1	608307	GATD6
CPT1A		600528	CPT1-L CPT1 L-CPT1
CPT1B		601987	CPT1-M M-CPT1
CPT1C	NM_001136052:6-7 NM_001199752:6-7 NM_001199753:6-7 NM_001378482:6-7	608846	CPTIC FLJ23809 CATL1 CPT1P

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
	NM_001378483:6-7 NM_001378484:5-6 NM_001378485:5-6 NM_001378486:6-7 NM_001378487:6-7 NM_001378488:6-7 NM_152359:5-6		
<i>CPT2</i>		600650	CPT1 CPTASE
<i>CR1</i>	NM_000651:5-23,26-27,29 NM_000573:5-15,18-19,21 NM_001381851:5-15,18-19,21	120620	KN CD35
<i>CR2</i>		120650	CD21 C3DR
<i>CRADD</i>		603454	RAIDD
<i>CRB1</i>		604210	RP12 LCA8
<i>CRB2</i>		609720	FLJ16786 FLJ38464
<i>CRBN</i>		609262	MRT2 MRT2A
<i>CREB1</i>		123810	
<i>CREB3</i>		606443	LZIP Luman sLZIP
<i>CREB3L1</i>		616215	OASIS
<i>CREB3L3</i>		611998	CREB-H CREBH
<i>CREBBP</i>		600140	KAT3A RTS RSTS CBP
<i>CRELD1</i>		607170	CIRRIN AVSD2
<i>CRH</i>		122560	CRF CRH1
<i>CRHR1</i>		122561	CRF-R CRF1 CRHR
<i>CRHR2</i>		602034	CRF2 HM-CRF CRF-RB
<i>CRIP1</i>		604594	HSPC139
<i>CRKL</i>		602007	
<i>CRLF1</i>	NM_004750:1	604237	CLF CISS CLF-1 CISS1
<i>CRMP1</i>		602462	DRP-1 DPYSL1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>CRP</i>		123260	PTX1
<i>CRPPA</i>		614631	Nip IspD ISPD hCG_1745121
<i>CRTAP</i>		605497	P3H5 CASP LEPREL3
<i>CRTC1</i>		607536	FLJ14027 KIAA0616 TORC1 MECT1
<i>CRX</i>		602225	LCA7 CORD2 OTX3 CRD
<i>CRY2</i>		603732	
<i>CRYAA</i>	NM_001363766:1	123580	CRYA1 HSPB4
<i>CRYAB</i>		123590	HSPB5 CRYA2
<i>CRYBA1</i>		123610	CRYB1
<i>CRYBA2</i>		600836	
<i>CRYBA4</i>		123631	
<i>CRYBB1</i>		600929	
<i>CRYBB2</i>	NM_000496:5	123620	CCA2 CRYB2 CRYB2A
<i>CRYBB3</i>		123630	CRYB3
<i>CRYGB</i>		123670	CRYG2
<i>CRYGC</i>		123680	CRYG3
<i>CRYGD</i>		123690	CRYG4
<i>CRYGS</i>		123730	CRYG8
<i>CRYL1</i>		609877	lambda-CRY GDH MGC149525 MGC149526
<i>CRYM</i>		123740	DFNA40
<i>CSF1R</i>		164770	CSFR CD115 FMS C-FMS
<i>CSF2RA</i>	NM_001161530:11 NM_001379153:10 NM_001379154:11 NM_001379159:13 NM_001379161:13 NM_001379162:12 NM_001379163:13 NM_001379164:13	306250	alphaGMR CD116 CSF2R

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
	NM_001379165:13 NM_001379166:10		
<i>CSF2RB</i>		138981	IL5RB CD131 IL3RB betaGMR
<i>CSF3R</i>		138971	GCSFR CD114
<i>CSNK1D</i>	NM_001363749:9	600864	CKID HCKID CKIdelta
<i>CSNK2A1</i>		115440	Cka1 Cka2
<i>CSPP1</i>	NM_001363131:11 NM_001363132:5 NM_001364869:5 NM_001382391:5,12	611654	JBTS21 CSPP-L FLJ22490 CSPP
<i>CSRP3</i>		600824	CMD1M MLP CLP
<i>CST3</i>		604312	
<i>CSTA</i>		184600	STF1 STFA
<i>CSTB</i>		601145	CST6 EPM1 STFB PME
<i>CTBP1</i>		602618	BARS
<i>CTC1</i>		613129	C17orf68 FLJ22170 AAF132
<i>CTCF</i>		604167	FAP108 CFAP108
<i>CTDP1</i>		604927	FCP1
<i>CTF1</i>		600435	CT-1 CT1
<i>CTH</i>		607657	CSE
<i>CTHRC1</i>		610635	
<i>CTLA4</i>		123890	IDDM12 CD152 CELIAC3 GSE CD CTLA-4
<i>CTNNA1</i>		116805	CAP102
<i>CTNNA3</i>		607667	VR22 MGC26194
<i>CTNNB1</i>		116806	armadillo CTNNB beta-catenin

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>CTNND2</i>	NM_001332:7 NM_001288715:6 NM_001364128:13	604275	GT24 NPRAP
<i>CTNS</i>		606272	PQLC4 SLC66A4 CTNS-LSB
<i>CTPS1</i>		123860	CTPS GATD5A
<i>CTR9</i>		609366	TSBP KIAA0155 p150TSP SH2BP1
<i>CTRC</i>		601405	ELA4 CLCR
<i>CTSA</i>		613111	PPGB GSL
<i>CTSB</i>		116810	
<i>CTSC</i>		602365	PALS DPP1 PLS
<i>CTSD</i>		116840	CLN10 CPSD
<i>CTSF</i>		603539	CATSF CLN13
<i>CTSH</i>		116820	ACC-5 ACC-4 CPSB ACC4 ACC5
<i>CTSK</i>		601105	PKND CTSO2 CTSO PYCD
<i>CUBN</i>		602997	gp280 IFCR MGA1
<i>CUL3</i>		603136	
<i>CUL4B</i>	NM_001369145:1	300304	
<i>CUL7</i>		609577	KIAA0076 dJ20C7.5
<i>CUX2</i>		610648	CUTL2 KIAA0293 CDP2
<i>CWC27</i>	NM_001364478:12	617170	NY-CO-10 SDCCAG-10 SDCCAG10
<i>CWF19L1</i>		616120	FLJ10998 hDm1
<i>CX3CR1</i>		601470	CMKBRL1 V28

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			CCRL1 GPR13 CMKDR1
<i>CXCR1</i>		146929	CMKAR1 IL8RA CD181 CKR-1 CDw128a
<i>CXCR2</i>		146928	IL8RB CD182 CMKAR2
<i>CXCR3</i>		300574	GPR9 IP10-R MigR CD183 CMKAR3 CKR-L2
<i>CXCR4</i>	NM_001348056:2 NM_001348059:2	162643	NPYY3R HSY3RR D2S201E CD184 fusin NPY3R NPYR LESTR HM89
<i>CXXC5</i>		612752	RINF HSPC195 WID
<i>CYB5A</i>		613218	CYB5
<i>CYB5R1</i>		608341	NQO3A2 humb5R2
<i>CYB5R2</i>		608342	
<i>CYB5R3</i>		613213	DIA1
<i>CYB5R4</i>		608343	b5+b5R NCB50R dJ676J13.1
<i>CYBA</i>		608508	p22-PHOX
<i>CYBB</i>		300481	GP91-PHOX CGD NOX2
<i>CYBRD1</i>		605745	CYB561A2 FRRS3 DCYTB FLJ23462
<i>CYC1</i>		123980	UQCR4
<i>CYCS</i>		123970	HCS CYC
<i>CYLD</i>		605018	USPL2 CYLD1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			KIAA0849
<i>CYP11A1</i>		118485	CYP11A P450SCC
<i>CYP11B1</i>		610613	FHI P450C11 CPN1 CYP11B
<i>CYP11B2</i>		124080	CYP11BL CYP11B ALDOS CPN2 P450aldo P-450C18
<i>CYP17A1</i>		609300	CYP17 S17AH CPT7 P450C17
<i>CYP19A1</i>		107910	CPV1 CYP19 P-450AROM ARO1 aromatase ARO CYAR
<i>CYP1A2</i>		124060	P3-450 CP12
<i>CYP1B1</i>		601771	CP1B GLC3A
<i>CYP24A1</i>		126065	CYP24 P450-CC24 CP24
<i>CYP26B1</i>		605207	P450RAI-2
<i>CYP26C1</i>		608428	
<i>CYP27A1</i>		606530	CYP27 CTX CP27
<i>CYP27B1</i>		609506	PDDR P450c1 CYP1 VDD1
<i>CYP2A6</i>	NM_000762:9	122720	CYP2A CPA6 CYP2A3
<i>CYP2B6</i>	NM_000767:2	123930	CYP2B CYPIIB6 CPB6
<i>CYP2C19</i>		124020	CYP2C CPCJ P450IIC19
<i>CYP2C8</i>		601129	CPC8

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>CYP2C9</i>		601130	CYP2C10 P450IIC9
<i>CYP2D6</i>	NM_000106:2,8-9 NM_001025161:2,7-8	124030	P450C2D CYP2D CPD6 CYP2D8P2 CYP2D7P2 CYP2D7AP CYP2D7BP P450-DB1 CYP2DL1
<i>CYP2R1</i>	NM_001377217:1-2 NM_001400567:1-2 NM_001400568:1	608713	
<i>CYP2U1</i>		610670	SPG49 SPG56
<i>CYP3A4</i>		124010	CYP3A3
<i>CYP3A43</i>		606534	
<i>CYP3A5</i>		605325	PCN3 P450PCN3 CP35
<i>CYP3A7</i>		605340	P450-HFLA CP37
<i>CYP3A7-CYP3A51P</i>	NM_001256497:14-15		
<i>CYP4A1</i>		604087	CYP46
<i>CYP4F2</i>		604426	
<i>CYP4F22</i>		611495	FLJ39501
<i>CYP4V2</i>		608614	CYP4AH1
<i>CYP51A1</i>		601637	P450L1 P450-14DM CYP51 CP51 CYPL1 LDM
<i>CYP7A1</i>		118455	CYP7
<i>CYP7B1</i>		603711	SPG5A
<i>D2HGDH</i>		609186	FLJ42195 D2HGD MGC25181
<i>DAB2IP</i>	NM_001395010:1	609205	DIP1/2 AIP1 AF9Q34 KIAA1743
<i>DACT1</i>		607861	HDPR1 DAPPER FRODO DAPPER1 THYEX3
<i>DAG1</i>		128239	156DAG A3a

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			DAG
			AGRNR
<i>DAO</i>		124050	DAMOX DAAO
<i>DAPK1</i>		600831	DAPK
<i>DAPK3</i>		603289	ZIP ZIPK
<i>DARS1</i>		603084	DARS
<i>DARS2</i>	NM_001365213:14	610956	FLJ10514 mtAspRS
<i>DAZL</i>		601486	SPGYLA DAZLA MGC26406 DAZL1 DAZH
<i>DBH</i>		609312	DBM
<i>DBT</i>		248610	BCKAD-E2 BCKDH-E2 BCOADC-E2
<i>DCAF17</i>		612515	C2orf37 FLJ13096
<i>DCAF8</i>		615820	H326 WDR42A FLJ35857
<i>DCC</i>		120470	NTN1R1 IGDCC1
<i>DCDC1</i>	NM_020869.3:all NM_001367979:9-38 NM_001387274:9-38 NM_001387275.1:all	608062	DCDC5 FLJ46154
<i>DCDC2</i>		605755	DCDC2A DFNB66 RU2 KIAA1154 NPHP19
<i>DCHS1</i>		603057	KIAA1773 CDHR6 CDH25 PCDH16 FLJ11790 FIB1
<i>DCHS2</i>		612486	CDHJ PCDH23 CDHR7 CDH27 PCDHJ FLJ20047
<i>DCLRE1B</i>		609683	SNM1B APOLLO FLJ12810

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			FLJ13998
<i>DCLRE1C</i>	NM_001350965:15 NM_001350966:13 NM_001350967:16	605988	A-SCID SCIDA SNM1C ARTEMIS FLJ11360
<i>DCN</i>		125255	DSPG2 SLRR1B
<i>DCPS</i>		610534	HSL1 HINT-5 HSPC015 HINT5
<i>DCSTAMP</i>		605933	DC-STAMP FIND TM7SF4
<i>DCTN1</i>		601143	
<i>DCX</i>		300121	DBCN SCLH LISX DC XLIS
<i>DCXR</i>		608347	HCR2 P34H DCR KIDCR SDR20C1
<i>DDB2</i>		600811	UV-DDB2 XPE FLJ34321 DDBB
<i>DDC</i>		107930	AADC
<i>DDHD1</i>		614603	iPLA1α PA-PLA1 PAPLA1 SPG28 KIAA1705
<i>DDHD2</i>		615003	KIAA0725 SAMWD1 iPLA1γ SPG54
<i>DDIT4</i>		607729	RTP801 REDD-1 FLJ20500 Dig2 REDD1
<i>DDOST</i>		602202	KIAA0115 WBP1 OST OST48
<i>DDR2</i>		191311	NTRKR3

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			TYRO10
			TKT
<i>DDRGK1</i>		616177	dJ1187M17.3 C20orf116 UFBP1
<i>DDX24</i>		606181	
<i>DDX3X</i>		300160	DBX DDX14 CAP-Rf HLP2 DDX3
<i>DDX41</i>		608170	MGC8828 ABS
<i>DDX58</i>		609631	DKFZp434J1111 RIG-I RIG-1 RIG1 FLJ13599
<i>DDX59</i>		615464	DKFZP564B1023 ZNHIT5
<i>DEAF1</i>		602635	SPN ZMYND5 NUDR
<i>DECR1</i>		222745	DECR SDR18C1
<i>DEFA4</i>		601157	DEF4 HP-4
<i>DENND2B</i>		140750	ST5 HTS1 p126
<i>DENR</i>		604550	SMAP-3 DRP DRP1
<i>DEPDC5</i>		614191	KIAA0645 DEP.5
<i>DERPC</i>	NM_001002847.3:all NM_001040144.2:all NM_001366602.4 NM_001366603.1:all NM_001366604.1:all NM_001366605.3 NM_001366606.3		
<i>DES</i>	NM_001382712:9	125660	CMD11 CSM2 CSM1
<i>DGAT1</i>		604900	ARGP1 DGAT
<i>DGAT2</i>		606983	
<i>DGAT2L6</i>		300926	FLJ25989 DC3

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>DGKE</i>		601440	DAGK6 DGK
<i>DGUOK</i>		601465	dGK
<i>DHCR24</i>		606418	seladin-1 KIAA0018 DCE
<i>DHCR7</i>		602858	SLOS
<i>DHDDS</i>		608172	HDS DS hCIT FLJ13102 RP59
<i>DHFR</i>	NM_000791:6 NM_001290354:5 NM_001290357:5	126060	
<i>DHH</i>		605423	MGC35145 HHG-3
<i>DHODH</i>		126064	
<i>DHTKD1</i>		614984	DKFZP762M115 MGC3090 KIAA1630 CMT2Q
<i>DHX34</i>	NM_014681:7	615475	DDX34 KIAA0134
<i>DHX38</i>		605584	PRPF16 hPrp16 KIAA0224 PRP16 DDX38
<i>DIABLO</i>		605219	DIABLO-S DFNA64 SMAC FLJ25049 FLJ10537
<i>DIAPH1</i>		602121	LFHL1 DFNA1 hDIA1 mDia1
<i>DIAPH2</i>		300108	POF POF2 DIA2 DIA
<i>DIAPH3</i>		614567	FLJ34705 AUNA1 AN NSDAN DRF3
<i>DICER1</i>	NM_001395699:11	606241	HERNA K12H4.8-LIKE MNG1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			KIAA0928 Dicer
<i>DIP2B</i>		611379	KIAA1463 FLJ34278
<i>DIS3L2</i>		614184	FLJ36974 FAM6A MGC42174
<i>DISC1</i>		605210	
<i>DISP1</i>		607502	MGC13130 MGC16796 DISPA DKFZP434I0428
<i>DKC1</i>		300126	dyskerin XAP101 NAP57 NOLA4 DKC Cbf5
<i>DLAT</i>		608770	DLTA PDC-E2 E2
<i>DLC1</i>		604258	p122-RhoGAP STARD12 ARHGAP7 HP DLC-1
<i>DLD</i>		238331	OGDC-E3 GCSL E3 DLDH LAD
<i>DLG2</i>	NM_001351274:2 NM_001351275:1 NM_001351276:1 NM_001377968:18 NM_001377973:1 NM_001377975:14 NM_001377976:2 NM_001377977:1 NM_001377979:6 NM_001377983:6	603583	PSD-93 chapsyn-110 PSD93 PPP1R58
<i>DLG3</i>		300189	MRX90 PPP1R82 SAP102 NE-Dlg KIAA1232 SAP-102 NEDLG
<i>DLG4</i>	NM_001369566:1	602887	PSD-95 SAP90

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			PSD95 SAP-90
<i>DLGAP2</i>		605438	C8orf68 DAP-2 ERICH1-AS1
<i>DLGAP3</i>		611413	DAP3 SAPAP3
<i>DLL1</i>		606582	
<i>DLL3</i>		602768	SCDO1
<i>DLL4</i>		605185	
<i>DLX3</i>		600525	
<i>DLX4</i>		601911	DLX9 DLX8 DLX7 BP1
<i>DLX5</i>		600028	
<i>DLX6</i>		600030	
<i>DMBX1</i>		607410	PAXB MBX Atx OTX3
<i>DMC1</i>		602721	LIM15
<i>DMD</i>		300377	DXS269 BMD DXS239 MRX85 DXS230 DXS164 DXS142 DXS268 DXS272 DXS206 DXS270
<i>DMGDH</i>		605849	ME2GLYDH
<i>DMP1</i>		600980	
<i>DMPK</i>		605377	MT-PK DM1 MDPK DM DM1PK DMK
<i>DMRT1</i>		602424	DMT1 CT154
<i>DMRTA2</i>		614804	
<i>DMXL2</i>	NM_001378457:34 NM_001378458:34 NM_001378459:32	612186	RC3 KIAA0856 DFNA71
<i>DNA2</i>		601810	KIAA0083 DNA2L
<i>DNAAF1</i>		613190	ODA7

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			CILD13 FLJ25330 LRRC50 DAU1 swt
<i>DNAAF11</i>		614930	tiIB LRRC6 TSLRP CILD19 LRTP
<i>DNAAF2</i>		612517	C14orf104 CILD10 FLJ10563 PF13 KTU
<i>DNAAF3</i>		614566	FLJ36139 CILD2 PCD PF22 C19orf51 FLJ40069
<i>DNAAF4</i>		608706	CILD25 DYX1C1 FLJ37882 EKN1
<i>DNAAF5</i>		614864	HEATR2 FLJ25564 FLJ39381 FLJ31671 FLJ20397 CILD18
<i>DNAAF6</i>		300933	PIH1D3 MGC35261 CXorf41 TWISTER NYSAR97
<i>DNAH1</i>		603332	HL11 DNAHC1 XLHSRF-1 HDHC7 HL-11
<i>DNAH10</i>	NM_001372106:12	605884	FLJ43808
<i>DNAH11</i>		603339	DNAHC11 DNHBL DNAHBL CILD7 Dnahc11 DPL11
<i>DNAH14</i>	NM_001367479:27,53-54 NM_001367481:8	603341	HL18 HL-18 DKFZp781B1548

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			Dnahc14 C1orf67 MGC27277
<i>DNAH5</i>		603335	Dnahc5 CILD3 HL1 PCD KTGNR
<i>DNAH6</i>		603336	Dnahc6 FLJ37357 DNHL1 HL-2
<i>DNAH8</i>		603337	hdhc9
<i>DNAI1</i>		604366	DIC1 PCD CILD1
<i>DNAI2</i>	NM_001353167:13	605483	CILD9 DIC2
<i>DNAJB13</i>		610263	RSPH16A TSARG6
<i>DNAJB2</i>		604139	HSPF3 HSJ1 CMT2T
<i>DNAJB6</i>		611332	LGMD1D MRJ
<i>DNAJC13</i>		614334	KIAA0678 RME8
<i>DNAJC17</i>		616844	FLJ10634
<i>DNAJC19</i>		608977	Tim14 Pam18 TIMM14
<i>DNAJC21</i>		617048	GS3 DNAJA5 JJJ1
<i>DNAJC3</i>		601184	P58IPK P58 ERdj6 PRKRI HP58 p58(IPK)
<i>DNAJC5</i>		611203	FLJ00118 DNAJC5A FLJ13070 CLN4
<i>DNAJC6</i>		608375	KIAA0473 PARK19
<i>DNAL1</i>		610062	C14orf168 MGC12435 CILD16 1700010H15RiK

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>DNAL4</i>		610565	PIG27 dJ327J16
<i>DNASE1</i>		125505	DNL1
<i>DNASE1L3</i>		602244	LSD DNAS1L3
<i>DND1</i>	NM_194249:4	609385	RBMS4 MGC34750
<i>DNM1</i>	NM_001374269:22	602377	DNM
<i>DNM1L</i>		603850	DVLP DRP1 VPS1 DYMPLE HDYNIV
<i>DNM2</i>		602378	CMTDIB CMT2M DYNII CMTDI1 DYN2 DI-CMTB
<i>DNMT1</i>	NM_001130823:5 NM_001318731:5	126375	MCMT DNMT CXXC9
<i>DNMT3A</i>		602769	
<i>DNMT3B</i>		602900	
<i>DOCK2</i>		603122	KIAA0209
<i>DOCK6</i>	NM_001367830:23	614194	KIAA1395 ZIR1
<i>DOCK7</i>		615730	ZIR2 KIAA1771
<i>DOCK8</i>		611432	FLJ00346 ZIR8 FLJ00026 FLJ00152
<i>DOK7</i>		610285	C4orf25 Dok-7 FLJ39137 FLJ33718
<i>DOLK</i>		610746	KIAA1094 TMEM15 DK1
<i>DONSON</i>		611428	B17 C21orf60 DKFZP434M035 C2TA
<i>DPAGT1</i>		191350	DPAGT DPAGT2 GPT CDG-Ij ALG7 D11S366

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			DGPT
<i>DPH1</i>		603527	OVCA1 DPH2L1 DPH2L
<i>DPM1</i>		603503	CDGIE MPDS
<i>DPM2</i>	NM_001378436:3	603564	MGC111193 MGC21559
<i>DPM3</i>		605951	MGC125905 MGC125904 MGC34275
<i>DPP6</i>	NM_130797:1 NM_001290253:1 NM_001364497:2 NM_001364498:2 NM_001364499:2 NM_001364500:2 NM_001364502:6	126141	DPPX DPL1
<i>DPY19L2</i>	NM_173812:5,9-10,12	613893	FLJ32949 SPATA34
<i>DPYD</i>		612779	DHPDHase DPD
<i>DPYS</i>		613326	DHPase
<i>DRAM2</i>	NM_001349886:6 NM_001349887:5 NM_001349888:6	613360	RP5-1180E21.1 TMEM77 MGC54289 WWFQ154 PRO180
<i>DRC1</i>		615288	MGC16372 CILD21 CCDC164 FLJ32660 C2orf39
<i>DRD1</i>		126449	
<i>DRD2</i>		126450	
<i>DRD3</i>		126451	
<i>DRD4</i>		126452	
<i>DRD5</i>		126453	DRD1L2 DRD1B
<i>DROSHA</i>		608828	RN3 Etohi2 HSA242976 RNASE3L RNASEN
<i>DRP2</i>		300052	
<i>DSC2</i>		125645	DSC3 CDHF2
<i>DSC3</i>		600271	DSC4 CDHF3 DSC1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			DSC2 DSC
<i>DSE</i>		605942	DS-Epi1 DSEPI SART2
<i>DSG1</i>		125670	CDHF4 DSG
<i>DSG2</i>		125671	CDHF5
<i>DSG3</i>		169615	CDHF6
<i>DSG4</i>		607892	CDHF13 LAH
<i>DSP</i>		125647	DPII PPKS2 DPI KPPS2
<i>DSPP</i>		125485	DMP3 DFNA39 DGI1
<i>DST</i>	NM_001374722:7,40-44 NM_001374729:36-40,95 NM_001374730:90 NM_001374734:7,40-44 NM_001374736:7,40-44,100	113810	CATX-15 FLJ32235 FLJ30627 BP240 MACF2 FLJ21489 KIAA0728 FLJ13425 BPAG1 BPA
<i>DSTYK</i>		612666	KIAA0472 SPG23 RIPK5 RIP5 DustyPK
<i>DTD1</i>	NM_001318043:5	610996	MGC41905 MGC119131 pqn-68 bA555E18.1 bA379J5.3 HARS2 DUEB C20orf88
<i>DTHD1</i>		616979	FLJ16686
<i>DTNA</i>		601239	DRP3 DTN D18S892E DTN-3 DTN-1 DTN-2
<i>DTNBP1</i>		607145	DBND Dysbindin

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			BLOC1S8 HPS7 My031
<i>DUOX2</i>	NM_014080:6-7 NM_001363711:6-7	606759	P138-TOX P138(TOX) LNOX2 THOX2
<i>DUOXA1</i>	NM_144565:4-9 NM_001276264:4-9 NM_001276265:1-5 NM_001276266.2:all NM_001276267.2:all NM_001276268.2:all NM_001384349.1:all	612771	mol NUMBIP FLJ32334 NIP
<i>DUOXA2</i>		612772	
<i>DUSP1</i>		600714	CL100 HVH1 PTPN10 MKP-1
<i>DUSP16</i>		607175	MKP-7 MKP7 KIAA1700
<i>DUSP2</i>		603068	PAC-1
<i>DUSP3</i>		600183	VHR
<i>DUSP4</i>		602747	MKP-2 TYP HVH2
<i>DUSP5</i>		603069	HVH3
<i>DUSP6</i>		602748	MKP-3 PYST1
<i>DUSP7</i>		602749	PYST2 MKP-X
<i>DUSP8</i>		602038	C11orf81 FLJ42958 HVH-5 HB5
<i>DVL1</i>		601365	
<i>DVL2</i>		602151	
<i>DVL3</i>		601368	KIAA0208
<i>DXO</i>		605996	DOM3Z
<i>DYM</i>	NM_001353212:14 NM_001353213:14 NM_001353214:14 NM_001353215:14 NM_001374428:15 NM_001374429:14 NM_001374430:14,18 NM_001374431:14 NM_001374432:13 NM_001374433:17	607461	FLJ20071 SMC DMC

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
	NM_001374441:9		
<i>DYNC1H1</i>		600112	CMT20 p22 HL-3 Dnchc1 DNCH1 DHC1 DNECL DNCL
<i>DYNC2H1</i>		603297	hdhc11 DHC1b DNCH2 DYH1B DHC2
<i>DYNC2I1</i>	NM_001350917:11 NM_001350918:12	615462	DIC6 FAP163 WDR60 CFAP163 FLJ10300
<i>DYNC2I2</i>		613363	CFAP133 MGC20486 DIC5 bA216B9.3 WDR34 FAP133
<i>DYNC2LI1</i>	NM_001348912:13 NM_001348913:13	617083	D2LIC CGI-60 LIC3 DKFZP564A033
<i>DYNLT2B</i>		617353	TCTEX1D2 MGC33212
<i>DYRK1A</i>		600855	MNBH DYRK1 DYRK
<i>DYRK1B</i>		604556	MIRK
<i>DYSF</i>		603009	FER1L1 LGMD2B
<i>E2F1</i>		189971	RBP3 RBBP3
<i>EARS2</i>		612799	KIAA1970 mtGlnRS MSE1
<i>EBF3</i>	NM_001375380:16 NM_001375389:16 NM_001375390:16	607407	COE3 DKFZp667B0210
<i>EBP</i>		300205	CHO2 CPX CDPX2 CPXD
<i>ECE1</i>		600423	ECE

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>ECEL1</i>		605896	DINE XCE
<i>ECHS1</i>		602292	SCEH
<i>ECI1</i>		600305	DCI
<i>ECM1</i>		602201	
<i>EDA</i>		300451	ODT1 ED1-A1 EDA1 XLHED HED EDA-A2 ED1 XHED ED1-A2 EDA-A1 EDA2
<i>EDA2R</i>		300276	XEDAR TNFRSF27 EDA-A2R EDAA2R
<i>EDAR</i>		604095	ED1R DL ED3 EDA3 ED5 EDA1R
<i>EDARADD</i>		606603	
<i>EDC3</i>		609842	YJEFN2 FLJ21128 YJDC LSM16 hYjeF_N2-15q23
<i>EDN1</i>		131240	ET1
<i>EDN3</i>		131242	ET3
<i>EDNRA</i>	NM_001354797:4	131243	ETA-R ET-A hET-AR
<i>EDNRB</i>		131244	HSCR2 HSCR ETB
<i>EED</i>		605984	HEED WAIT-1
<i>EEF1A2</i>		602959	HS1 STN EEF1AL STNL
<i>EEF2</i>		130610	EF2 EEF-2
<i>EFCAB10</i>	NM_001355530:1-4 NM_001355526:1-4		

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeq transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
	NM_001355527.1:all NM_001355529.1:all NM_001355531.1-3		
<i>EFCAB13</i>			FLJ40342 C17orf57
<i>EFEMP1</i>		601548	FBNL DHRD FBLN3 MTLV S1-5
<i>EFEMP2</i>		604633	FBLN4 UPH1
<i>EFHC1</i>		608815	EJM1 EJM POC9 RIB72 FLJ10466
<i>EFHC2</i>		300817	MRX74 FLJ22843
<i>EFNA4</i>		601380	EPLG4 LERK4
<i>EFNA5</i>		601535	LERK7 EPLG7 AF1
<i>EFNB1</i>		300035	LERK2 CFNS EPLG2 Elk-L
<i>EFTUD2</i>		603892	SNRNP116 U5-116KD Snrp116 Snu114
<i>EGF</i>		131530	
<i>EGFR</i>		131550	ERBB1 ERRP ERBB
<i>EGLN1</i>		606425	HIFPH2 ZMYND6 PHD2 SM-20 C1orf12
<i>EGLN2</i>		606424	HIFPH1 PHD1
<i>EGR2</i>		129010	KROX20
<i>EHBP1</i>		609922	KIAA0903 NACSIN
<i>EHHADH</i>		607037	ECHD
<i>EHMT1</i>	NM_024757:1 NM_001145527:1 NM_001354259:16	607001	KIAA1876 KMT1D EHMT1-IT1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
	NM_001354263:1 NM_001354611:1		FLJ12879 FLJ40292 GLP Eu-HMTase1 bA188C12.1
<i>EIF2AK3</i>		604032	PEK PERK
<i>EIF2AK4</i>		609280	GCN2 KIAA1338
<i>EIF2B1</i>		606686	EIF2Balpha EIF-2Balpha EIF2BA EIF-2B EIF2B
<i>EIF2B2</i>		606454	EIF2Bbeta EIF-2Bbeta EIF2B
<i>EIF2B3</i>		606273	EIF-2B EIF2Bgamma
<i>EIF2B4</i>		606687	EIF2B EIF-2B DKFZP586J0119 EIF2Bdelta
<i>EIF2B5</i>		603945	EIF2Bepsilon EIF-2B
<i>EIF2S3</i>		300161	EIF2 EIF2gamma EIF2G
<i>EIF4A3</i>		608546	DDX48 Fal1 KIAA0111 EIF4AIII
<i>EIF4E</i>	NM_001130679:8 NM_001130678:7 NM_001331017:8 NM_001968:7	133440	EIF4E1 EIF4EL1 EIF4F
<i>EIF4ENIF1</i>		607445	FLJ21601 2610509L04Rik Clast4 4E-T
<i>EIF4G1</i>		600495	EIF4F p220 PARK18 EIF4G
<i>ELAC2</i>		605367	FLJ10530 HPC2
<i>ELANE</i>		130130	NE HNE ELA2 PMN-E

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			HLE
<i>ELF4</i>		300775	ELFR MEF
<i>ELK1</i>		311040	
<i>ELK3</i>		600247	SAP2 ERP NET
<i>ELK4</i>		600246	SAP1
<i>ELMO2</i>		606421	ELMO-2 KIAA1834 FLJ11656 CED12 CED-12
<i>ELMOD2</i>		610196	MGC10084
<i>ELMOD3</i>		615427	DFNB88 RBED1 FLJ21977 RBM29
<i>ELN</i>		130160	WBS WS SVAS
<i>ELOVL4</i>		605512	SCA34 CT118 STGD2 STGD3
<i>ELOVL5</i>		611805	dJ483K16.1 HELO1 SCA38
<i>ELP1</i>		603722	DYS IKI3 TOT1 IKAP IKBKAP
<i>ELP2</i>		616054	FLJ10879 STATIP1 StIP
<i>ELP4</i>		606985	PAXNEB C11orf19
<i>EMC1</i>	NM_001375820:14 NM_001375821:14	616846	KIAA0090
<i>EMD</i>		300384	LEMD5 STA
<i>EMG1</i>		611531	NEP1 C2F Grcc2f
<i>EMILIN1</i>		130660	EMILIN gp115 DKFZp586M121
<i>EML1</i>	NM_001375411:1	602033	EMAP HuEMAP

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			EMAPL ELP79
<i>EMP2</i>		602334	XMP
<i>EMX2</i>		600035	
<i>EN2</i>		131310	
<i>ENAM</i>		606585	AIH2
<i>ENG</i>		131195	END CD105 ORW1 ORW HHT1
<i>ENHO</i>		618556	C9orf165 UNQ470
<i>ENO3</i>	NM_001374524:1	131370	
<i>ENPP1</i>	NM_006208:1	173335	M6S1 PC-1 PDNP1 PCA1 NPPS
<i>ENTPD1</i>		601752	CD39 SPG64 ATPDase NTPDase-1
<i>ENTPD5</i>	NM_001382263.1:all NM_001249.5:all NM_001321984.5:16 NM_001321985.3:all NM_001321986.3:all NM_001321987.3:all NM_001321988.3:all NM_001330189.5:16 NM_001382256.1:all NM_001382257.1:all NM_001382258.1:all NM_001382259.4:15 NM_001382260.3:14 NM_001382262.4:15	603162	PCPH CD39L4 NTPDase-5
<i>EOGT</i>		614789	C3orf64 FLJ33770 AER61
<i>EOMES</i>		604615	TBR2
<i>EP300</i>		602700	p300 KAT3B
<i>EPAS1</i>		603349	HLF MOP2 bHLHe73 PASD2 HIF2A
<i>EPB41</i>	NM_001376014:15 NM_001376016:17-18	130500	EL1 4.1R

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
	NM_001376017:17-18		
	NM_001376018:17-18		
	NM_001376019:17-18		
	NM_001376020:17-18		
	NM_001376021:14-15		
	NM_001376023:17-18		
	NM_001376024:17-18		
	NM_001376025:17-18		
	NM_001376026:15-16		
	NM_001376027:14-15		
	NM_001376028:14-15		
<i>EPB41L1</i>		602879	KIAA0338 4.1N
<i>EPB41L4A</i>	NM_001347887:23-24	612141	NBL4
<i>EPB42</i>		177070	PA MGC116735 MGC116737
<i>EPCAM</i>		185535	EGP40 HEA125 ESA GA733-2 M4S1 EGP34 TROP1 CO-17A 17-1A MOC31 MK-1 EGP-2 Ly74 TACSTD1 TACST-1 MOC-31 KSA 323/A3 Ber-Ep4 Ep-CAM MIC18 CD326 MH99 KS1/4 BerEp4
<i>EPG5</i>		615068	KIAA1632 hEPG5
<i>EPHA1</i>		179610	EPHT1 EPH EPHT
<i>EPHA2</i>		176946	ECK
<i>EPHA4</i>		602188	Hek8 TYRO1
<i>EPHA5</i>		600004	TYRO4

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			EHK1 CEK7 Hek7
<i>EPHA6</i>		600066	FLJ35246
<i>EPHB2</i>		600997	ERK Hek5 EPHT3 DRT Tyro5
<i>EPHB4</i>		600011	HTK Tyro11
<i>EPHX1</i>		132810	EPHX
<i>EPHX2</i>		132811	ABHD20 sEH
<i>EPM2A</i>	NM_001368129:3 NM_001368132:3	607566	LD LDE
<i>EPO</i>		133170	EP
<i>EPOR</i>		133171	
<i>EPRS1</i>		138295	PARS EPRS QARS GLUPRORS EARS QPRS
<i>EPS8</i>		600206	
<i>EPS8L2</i>		614988	FLJ22171 FLJ21935 MGC3088
<i>EPS8L3</i>		614989	MGC16817 FLJ21522
<i>EPX</i>		131399	EPP EPO EPX-PEN
<i>ERBB2</i>	NM_001382784:10 NM_001382785:15 NM_001382786:10	164870	c-ERB2 c-ERB-2 CD340 NGL HER-2 NEU HER2
<i>ERBB3</i>		190151	LCCS2 HER3
<i>ERBB4</i>		600543	ALS19 HER4
<i>ERBIN</i>		606944	ERBB2IP LAP2
<i>ERCC1</i>		126380	RAD10
<i>ERCC2</i>		126340	MAG MGC126219 MGC102762

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			XPD EM9 MGC126218
<i>ERCC3</i>		133510	RAD25 Ssl2 BTF2 XPB
<i>ERCC4</i>		133520	FANCC RAD1 XPF
<i>ERCC5</i>		133530	XPGC ERCM2
<i>ERCC6</i>		609413	CSB CKN2 ARMD5 RAD26
<i>ERCC6L2</i>	NM_001375291:19 NM_001375292:19 NM_001375293:18 NM_001375294:18	615667	HEBO C9orf102 RAD26L FLJ37706
<i>ERCC8</i>		609412	CSA CKN1
<i>ERF</i>		611888	PE-2 PE2
<i>ERLIN1</i>		611604	KE04 Erlin-1 SPFH1 SPG62 C10orf69
<i>ERLIN2</i>		611605	Erlin-2 SPFH2 SPG18 NET32 C8orf2
<i>ERMAP</i>		609017	SC BTN5 RD
<i>ERMARD</i>		615532	C6orf70 FLJ11152 dJ266L20.3
<i>ERMP1</i>		611156	FXNA KIAA1815 FLJ23309
<i>ESCO2</i>		609353	RBS EFO2
<i>ESPN</i>	NM_001367474:10	606351	DFNB36
<i>ESR1</i>		133430	ER-alpha Era NR3A1 ESR

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>ESR2</i>		601663	Erb NR3A2 ER-beta
<i>ESRRA</i>		601998	ERR1 ERRalpha ESRL1 ERRa NR3B1
<i>ESRRB</i>	NM_001379180:1	602167	NR3B2 ERRbeta DFNB35 ESRL2 ERRb ERR2
<i>ETF1</i>		600285	TB3-1 SUP45L1 ERF1 RF1 eRF1 ERF
<i>ETFA</i>		608053	MADD EMA GA2
<i>ETFB</i>		130410	
<i>ETFDH</i>		231675	ETFQO
<i>ETHE1</i>		608451	YF13H12 HSCO
<i>ETNPPL</i>	NM_001146627:1	614682	AGXT2L1
<i>ETV5</i>		601600	ERM
<i>ETV6</i>		600618	TEL
<i>EVC</i>	NM_153717:1 NM_001306090:1 NM_001306092:1	604831	DWF-1 EVC1
<i>EVC2</i>		607261	LBN
<i>EWSR1</i>		133450	EWS
<i>EXO1</i>		606063	hExo1 HEX1
<i>EXOC4</i>		608185	MGC27170 Sec8p SEC8L1 KIAA1699 SEC8
<i>EXOC6B</i>		607880	KIAA0919 SEC15B SEC15L2
<i>EXOC8</i>		615283	Exo84p SEC84 EXO84
<i>EXOSC2</i>		602238	Rrp4p hRrp4p

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			p7 RRP4
<i>EXOSC3</i>		606489	p10 hRrp40p CGI-102 RRP40 hRrp-40 Rrp40p
<i>EXOSC8</i>		606019	OIP2 bA421P11.3 CIP3 RRP43 Rrp43p p9 EAP2
<i>EXPH5</i>		612878	SLAC2-B
<i>EXT1</i>		608177	LGS ttv LGCR
<i>EXT2</i>		608210	SOTV
<i>EXTL3</i>		605744	REGR botv
<i>EYA1</i>	NM_001370333:2 NM_001370336:2 NM_172059:2	601653	BOR
<i>EYA4</i>		603550	DFNA10 CMD1J
<i>EYS</i>		612424	C6orf180 bA307F22.3 SPAM C6orf179 dJ303F19.1 bA74E24.1 EGFL11 RP25 C6orf178 dJ1018A4.2 EGFL10 bA166P24.2
<i>EZH2</i>		601573	ENX-1 EZH1 KMT6 KMT6A
<i>EZR</i>		123900	VIL2
<i>F10</i>		613872	
<i>F11</i>		264900	FXI
<i>F12</i>		610619	
<i>F13A1</i>		134570	F13A
<i>F13B</i>		134580	FXIIIB
<i>F2</i>		176930	

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>F2R</i>		187930	PAR-1 TR CF2R PAR1
<i>F5</i>		612309	
<i>F7</i>		613878	
<i>F8</i>	NM_019863:1	300841	HEMA DXS1253E FVIII F8C
<i>F9</i>		300746	FIX
<i>FA2H</i>		611026	FLJ25287 FAAH FAXDC1 SPG35
<i>FAAH</i>		602935	FAAH-1
<i>FAAH2</i>		300654	FLJ31204 AMDD FAAH-2 RP11-479E16.1
<i>FAAP24</i>		610884	C19orf40 MGC32020 FLJ46828
<i>FABP3</i>		134651	MDGI O-FABP H-FABP FABP11
<i>FABP7</i>		602965	BLBP B-FABP
<i>FADD</i>		602457	GIG3 MORT1
<i>FAH</i>		613871	
<i>FAM111A</i>		615292	FLJ22794 KIAA1895
<i>FAM111B</i>		615584	CANP
<i>FAM120A</i>	NM_014612:2-18 NM_001286722:2-18 NM_001286723:2-10 NM_001286724:2-9	612265	OSSA KIAA0183 C9orf10
<i>FAM120AOS</i>			C9orf10OS
<i>FAM126A</i>	NM_001363466:11 NM_001363467:11	610531	DRCTNNB1A HYCC1 hyccin HCC
<i>FAM136A</i>		616275	FLJ14668
<i>FAM161A</i>		613596	FLJ13305 RP28
<i>FAM177A1</i>		619181	C14orf24
<i>FAM20A</i>		611062	DKFZp434F2322
<i>FAM20C</i>		611061	IMAGE:4942737

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			G-CK DMP4 DKFZp547D065
<i>FAM83H</i>		611927	FLJ46072
<i>FAN1</i>		613534	MTMR15 KIAA1018
<i>FANCA</i>	NM_001018112:11 NM_001351830:10	607139	FACA FANCH FAA FA-H FAH
<i>FANCB</i>		300515	FAB FAAP95 FLJ34064
<i>FANCC</i>		613899	FA3 FACC FAC
<i>FANCD2</i>	NM_033084:22 NM_001018115:22 NM_001319984:22 NM_001374253:21 NM_001374254:22 NM_001374255:10	613984	FANCD FACD FAD FA-D2
<i>FANCE</i>		613976	FAE FACE
<i>FANCF</i>		613897	FAF
<i>FANCG</i>		602956	FAG XRCC9
<i>FANCI</i>		611360	FLJ10719 KIAA1794
<i>FANCL</i>	NM_001374615:8	608111	FLJ10335 Pog FAAP43 PHF9
<i>FANCM</i>		609644	FAAP250 KIAA1596
<i>FAR1</i>		616107	FLJ22728 SDR10E1 MLSTD2
<i>FARS2</i>		611592	mtPheRS dJ236A3.1 FARS1
<i>FAS</i>		134637	APT1 FAS1 CD95 TNFRSF6 APO-1
<i>FASLG</i>		134638	APT1LG1 TNFSF6 CD178

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			FasL
<i>FASN</i>		600212	FAS SDR27X1
<i>FASTKD2</i>		612322	KIAA0971
<i>FASTKD3</i>		617530	MGC5297 FLJ23274
<i>FAT1</i>		600976	CDHF7 FAT CDHR8
<i>FAT3</i>	NM_001367949:26-27 NM_001378141:4	612483	CDHR10 KIAA1989 CDHF15
<i>FAT4</i>		612411	CDHF14 CDHR11 FAT-J
<i>FBLN1</i>		135820	FBLN
<i>FBLN2</i>		135821	
<i>FBLN5</i>	NM_001384158:4 NM_001384159:1 NM_001384160:11 NM_001384161:12	604580	ARMD3 EVEC UP50 DANCE
<i>FBN1</i>		134797	WMS MFS1 MASS SGS FBN OCTD
<i>FBN2</i>		612570	DA9 CCA
<i>FBP1</i>		611570	FBP
<i>FBXL4</i>		605654	FBL5 FBL4
<i>FBXL6</i>		609076	FBL6
<i>FBXO31</i>		609102	FBXO14 MGC15419 FBX14 Fbx31
<i>FBXO32</i>		606604	Fbx32 ATROGIN1 MAFbx
<i>FBXO38</i>		608533	FLJ13962 SP329 Fbx38 MOKA
<i>FBXO7</i>		605648	PARK15 Fbx FBX7
<i>FBXW4</i>		608071	Fbw4 dactylin SHFM3

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>FCGR2A</i>		146790	FcgammaRIIa CDw32 CD32A CD32 FCGR2 IGFR2 FCGR2A1 FCG2 Fc-gamma-RIIa
<i>FCGR3A</i>	NM_000569:1-3 NM_001127592:1-3 NM_001127593:2-4 NM_001127595:2-4 NM_001127596:2-4 NM_001329120:2-4 NM_001329122:1-3 NM_001386450:2-4	146740	CD16a FcGRIIIA FCG3 CD16 FCGR3 FcgammaRIIIa
<i>FCGR3B</i>	NM_000570:2-4 NM_001244753:1-3 NM_001271035:1-3 NM_001271036:2-3 NM_001271037:2-3	610665	CD16b FCG3 CD16 FCGR3 FcRIIIb FcgammaRIIIb
<i>FCN1</i>		601252	FCNM
<i>FCN2</i>		601624	EBP-37 FCNL ficolin-2 P35
<i>FCN3</i>		604973	FCNH HAKA1
<i>FDPS</i>		134629	
<i>FECH</i>		612386	
<i>FEN1</i>		600393	MF1 FEN-1 RAD2
<i>FERMT1</i>		607900	KIND1 FLJ20116 UNC112A URP1 C20orf42
<i>FERMT3</i>		607901	UNC112C MIG2B URP2 KIND3 MGC10966
<i>FEZF1</i>		613301	ZNF312B
<i>FGA</i>		134820	
<i>FGB</i>		134830	
<i>FGD1</i>		300546	FGDY ZFYVE3

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>FGD4</i>	NM_001370298:1 NM_001384126:1,18 NM_001384127:18 NM_001384128:18	611104	ZFYVE6 CMT4H FRABP frabin
<i>FGF1</i>		131220	GLIO703 ECGFB HBGF1 FGF-alpha FGFA ECGFA ECGF AFGF ECGF-beta
<i>FGF10</i>		602115	
<i>FGF12</i>		601513	FGF12B FHF1
<i>FGF14</i>	NM_001321937:4	601515	FHF4 SCA27
<i>FGF16</i>		300827	MF4
<i>FGF17</i>		603725	FGF-13
<i>FGF20</i>		605558	
<i>FGF23</i>		605380	
<i>FGF3</i>		164950	HBGF-3 INT2
<i>FGF5</i>		165190	
<i>FGF8</i>		600483	AIGF
<i>FGF9</i>		600921	
<i>FGFBP1</i>		607737	FGFBP HBP17
<i>FGFR1</i>	NM_001354367:18 NM_001354369:18 NM_001354370:17	136350	BFGFR N-SAM FLG H3 KAL2 CEK H4 H5 FLT2 CD331 H2
<i>FGFR2</i>		176943	CEK3 BEK JWS K-SAM TK14 KGFR CFD1 ECT1 TK25 CD332

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>FGFR3</i>		134934	JTK4 CEK2 ACH CD333
<i>FGFR4</i>		134935	JTK2 CD334
<i>FGG</i>		134850	
<i>FH</i>		136850	
<i>FHL1</i>		300163	XMPMA KYO-T MGC111107 FLH1A SLIM1 FHL1B bA535K18.1
<i>FHL2</i>		602633	DRAL SLIM3
<i>FHOD3</i>		609691	FLJ22297 FLJ22717 FHOS2 KIAA1695
<i>FIBP</i>		608296	FGFIBP
<i>FIG4</i>		609390	dJ249I4.1 ALS11 SAC3 KIAA0274 CMT4J hSac3
<i>FIGLA</i>		608697	Figalpha bHLHc8
<i>FKBP10</i>		607063	FLJ23833 hFKBP65 FKBP6 FLJ22041 FLJ20683 FKBP65
<i>FKBP14</i>		614505	FKBP22 FLJ20731
<i>FKBP5</i>		602623	PPlase Ptg-10 FKBP54 P54 FKBP51
<i>FKBP6</i>	NM_003602:1-2 NM_001135211:2 NM_001281304:1-2 NM_001362789:2	604839	FKBP36 PPlase
<i>FKBPL</i>		617076	WISp39 NG7 DIR1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>FKRP</i>		606596	FKTR MDC1C LGMD2I
<i>FKTN</i>	NM_001351497:6	607440	FCMD LGMD2M
<i>FLAD1</i>		610595	PP591 FAD1
<i>FLCN</i>	NM_001353229:7	607273	MGC23445 BHD MGC17998 DENND8B
<i>FLG</i>		135940	
<i>FLI1</i>		193067	FLI-1 EWSR2 SIC-1
<i>FLNA</i>		300017	FLN1 OPD2 ABP-280 OPD1 FLN
<i>FLNB</i>		603381	TABP LRS1 TAP FH1 ABP-278 FLN1L
<i>FLNC</i>	NM_001458:47 NM_001127487:46	102565	ABPL FLN2 ABP-280
<i>FLRT1</i>		604806	MGC21624 SPG68
<i>FLRT3</i>		604808	
<i>FLT1</i>		165070	VEGFR1 FLT
<i>FLT3</i>		136351	CD135 STK1 FLK2
<i>FLT4</i>	NM_001354989:30	136352	PCL VEGFR-3 VEGFR3
<i>FLVCR1</i>		609144	PCA AXPC1 SLC49A1 MFSD7B FLVCR
<i>FLVCR2</i>		610865	MFSD7C SLC49A2 CCT FLJ20371 C14orf58

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>FMN1</i>		136535	DKFZP686C2281 FLJ45135 MGC125288 LD MGC125289 FMN
<i>FMN2</i>	NM_020066:5 NM_001305424:6	606373	
<i>FMO3</i>		136132	FMOII
<i>FMR1</i>		309550	POF1 MGC87458 POF FRAXA FMRP
<i>FN1</i>		135600	FINC MSF LETS GFND2 CIG
<i>FN3K</i>		608425	
<i>FNIP1</i>		610594	KIAA1961
<i>FOCAD</i>		614606	KIAA1797 FLJ20375
<i>FOLH1</i>	NM_004476:16 NM_001014986:16 NM_001193471:17 NM_001193472:17 NM_001193473:14 NM_001351236:17	600934	PSM PSMA FOLH GCP11 NAALAD1 NAALAdase GCP2
<i>FOLR1</i>		136430	FOLR FRα
<i>FOXA2</i>		600288	HNF3B
<i>FOXA3</i>		602295	HNF3G
<i>FOXC1</i>		601090	IGDA IHG1 IRID1 FREAC3 ARA FKHL7
<i>FOXC2</i>		602402	MFH-1 FKHL14
<i>FOXE1</i>		602617	FOXE2 FKHL15 HFKH4 TTF-2 TITF2
<i>FOXE3</i>		601094	FREAC8 FKHL12
<i>FOXF1</i>		601089	FKHL5

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			FREAC1
<i>FOXG1</i>		164874	HFK3 FKHL4 HFK2 HFK1 FKHL3 FOXG1A FKHL2 FOXG1B FKH2 HBF-3 BF1 FOXG1C QIN FKHL1
<i>FOXH1</i>		603621	FAST1
<i>FOXI1</i>		601093	FREAC6 FKHL10
<i>FOXL1</i>		603252	FREAC7 FKH6 FKHL11
<i>FOXL2</i>		605597	BPES1 BPES
<i>FOXN1</i>		600838	WHN FKHL20 RONU
<i>FOXO1</i>		136533	FOXO1A FKHR FKH1
<i>FOXP1</i>		605515	HSPC215 hFKH1B QRF1 12CC4
<i>FOXP2</i>		605317	CAGH44 TNRC10 SPCH1
<i>FOXP3</i>		300292	IPEX JM2 DIETER SCURFIN AIID PIDX XPID
<i>FOXRED1</i>		613622	H17
<i>FPGS</i>		136510	
<i>FPGT-TNNI3K</i>	NM_001112808:1-3 NM_001199327:1-3,24		
<i>FPR1</i>		136537	FMLP FPR
<i>FPR2</i>		136538	FPRH2

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			FMLPX FPRL1 FPR2A ALXR ALX HM63 FMLP-R-II LXA4R
<i>FRAS1</i>		607830	FLJ14927 FLJ22031 KIAA1500
<i>FREM1</i>	NM_001370060:8 NM_001370063:8 NM_001370065:8	608944	DKFZp686M16108 C9orf154 C9orf143 C9orf145 FLJ25461 TILRR
<i>FREM2</i>		608945	DKFZp686J0811
<i>FRMD4A</i>		616305	FRMD4 KIAA1294 bA295P9.4 FLJ10210
<i>FRMD7</i>		300628	NYS1 FLJ43346 NYS
<i>FRMPD4</i>	NM_001368395:2-3 NM_001368398:2-3 NM_001368399:1 NM_001368401:2 NM_001368402:2	300838	KIAA0316 PDZK10 PDZD10
<i>FRRS1L</i>		604574	CG-6 C9orf4
<i>FRY</i>		614818	bA37E23.1 C13orf14 CG003 13CDNA73
<i>FRZB</i>		605083	FRP-3 FRITZ SFRP3 SRFP3 FZRB FRE FRZB-1 FRZB-PEN hFIZ FRZB1
<i>FSBP</i>	NM_001256141:1	616306	
<i>FSCN2</i>		607643	RP30 RFSN
<i>FSHB</i>		136530	

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>FSHR</i>		136435	FSHRO ODG1 LGR1
<i>FTCD</i>		606806	
<i>FTCD-AS1</i>	NM_001350598:2		
<i>FTH1</i>		134770	FTHL6 PIG15 FHC FTH PLIF
<i>FTL</i>		134790	MGC71996 NBIA3
<i>FTMT</i>		608847	MtF
<i>FTO</i>	NM_001363894:8 NM_001363896:8 NM_001363988:9	610966	MGC5149 ALKBH9 KIAA1752
<i>FTSJ1</i>		300499	TRM7 SPB1 TRMT7 JM23 MRX44 CDLIV MRX9
<i>FUCA1</i>		612280	
<i>FUS</i>		137070	HNRNPP2 hnRNP-P2 FUS1 TLS ALS6
<i>FUT1</i>		211100	H HSC
<i>FUT2</i>		182100	Se2 SEC2 SE sej
<i>FUT7</i>		602030	
<i>FUZ</i>		610622	FLJ22688 CPLANE3 Fy
<i>FXN</i>		606829	X25 FA FARR CyaY FRDA
<i>FXYD2</i>		601814	ATP1G1 MGC12372 HOMG2
<i>FXYD6-FXYD2</i>	NM_001204268:2-6 NM_001243598:2-6		
<i>FYB1</i>	NM_018594:2	602731	ADAP

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			FYB SLAP-130 FYB-120/130
<i>FYC01</i>	NM_001386424:17-18 NM_001386425:18 NM_001386428:18 NM_001386429:17	607182	FLJ13335 ZFVVE7
<i>FZD2</i>		600667	
<i>FZD4</i>		604579	CD344 EVR1
<i>FZD5</i>		601723	DKFZP434E2135 HFZ5 C2orf31
<i>FZD6</i>		603409	Hfz6
<i>G6PC1</i>		613742	G6PT GSD1a G6PC
<i>G6PC2</i>		608058	IGRP
<i>G6PC3</i>		611045	UGRP
<i>G6PD</i>		305900	G6PD1
<i>GAA</i>		606800	
<i>GAB2</i>		606203	KIAA0571
<i>GABARAP</i>		605125	ATG8A MM46
<i>GABARAPL1</i>		607420	ATG8L ATG8B APG8L gec1
<i>GABARAPL2</i>		607452	GATE16 ATG8 GEF2 ATG8C GATE-16
<i>GABBR1</i>		603540	hGB1a GPRC3A
<i>GABBR2</i>	NM_005458:1	607340	GABABR2 GPR51 HG20 GPRC3B
<i>GABRA1</i>		137160	EJM5
<i>GABRA2</i>		137140	
<i>GABRA4</i>		137141	
<i>GABRA5</i>		137142	
<i>GABRA6</i>		137143	
<i>GABRB1</i>		137190	
<i>GABRB2</i>		600232	
<i>GABRB3</i>		137192	
<i>GABRD</i>		137163	
<i>GABRE</i>		300093	
<i>GABRG1</i>		137166	

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>GABRG2</i>	NM_001375344:7 NM_001375347:1	137164	
<i>GABRG3</i>		600233	
<i>GABRP</i>		602729	
<i>GABRQ</i>		300349	
<i>GABRR1</i>		137161	
<i>GABRR2</i>		137162	
<i>GAD1</i>		605363	GAD
<i>GAD2</i>		138275	GAD65
<i>GAK</i>		602052	DNAJC26
<i>GAL</i>		137035	GLNN GMAP GALN GAL-GMAP
<i>GAL3ST2</i>		608237	GP3ST
<i>GAL3ST4</i>		608235	FLJ12116
<i>GALC</i>		606890	
<i>GALE</i>		606953	SDR1E1
<i>GALK1</i>		604313	GALK
<i>GALNS</i>		612222	GAS GalN6S GALNAC6S
<i>GALNT12</i>		610290	GalNAc-T12
<i>GALNT14</i>		608225	GalNAc-T10 FLJ12691 GalNAc-T14
<i>GALNT2</i>		602274	GalNAc-T2
<i>GALNT3</i>		601756	GalNAc-T3 HHS HFTC
<i>GALNTL5</i>		615133	GALNT15 GalNAc-T5L
<i>GALP</i>		611178	
<i>GALT</i>		606999	
<i>GAMT</i>		601240	PIG2 TP53I2
<i>GAN</i>		605379	KLHL16 GIG GAN1
<i>GANAB</i>		104160	GluII KIAA0088 GIIA G2AN
<i>GAP43</i>		162060	PP46 GAP-43 B-50
<i>GARS1</i>		600287	GARS DSMAV SMAD1 GlyRS

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			CMT2D
<i>GAS1</i>		139185	
<i>GAS8</i>		605178	DRC4 GAS11
<i>GATA1</i>		305371	GATA-1 NF-E1 NFE1 ERYF1 GF1
<i>GATA2</i>		137295	NFE1B
<i>GATA3</i>		131320	HDR
<i>GATA4</i>		600576	
<i>GATA5</i>		611496	GATAS bB379024.1
<i>GATA6</i>		601656	
<i>GATAD1</i>		614518	RG083M05.2 FLJ22489 ODAG
<i>GATAD2B</i>		614998	P66beta
<i>GATM</i>		602360	AGAT
<i>GBA</i>	NM_001005741:12 NM_000157:11 NM_001005742:12 NM_001171811:10 NM_001171812:10	606463	GBA1 GLUC
<i>GBA2</i>		609471	AD035 DKFZp762K054 SPG46 KIAA1605
<i>GBE1</i>		607839	
<i>GCDH</i>		608801	GCD ACAD5
<i>GCGR</i>		138033	GGR
<i>GCH1</i>		600225	DYT5a GTPCH1 DYT5 DYT14 GCH
<i>GCHFR</i>		602437	GFRP HsT16933
<i>GCK</i>	NM_001354800:11 NM_001354802:4 NM_001354803:1	138079	HK4 MODY2
<i>GCKR</i>		600842	
<i>GCLC</i>		606857	GCS GLCL GLCLC
<i>GCM2</i>		603716	hGCMb GCMB
<i>GCNT2</i>		600429	II

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			GCNT5 CCAT IGNT bA360O19.2 NACGT1 ULG3 bA421M1.1 NAGCT1
<i>GCSH</i>		238330	
<i>GDAP1</i>	NM_001362931:6	606598	CMT4 CMT2K CMT4A
<i>GDF1</i>		602880	
<i>GDF2</i>		605120	BMP9 BMP-9
<i>GDF3</i>		606522	
<i>GDF5</i>		601146	BMP14 CDMP1
<i>GDF6</i>		601147	SGM1 BMP13 KFS1 KFS
<i>GDF9</i>		601918	
<i>GDI1</i>		300104	GDIL MRX48 RABGDIA FLJ41411 MRX41 XAP-4 OPHN2
<i>GDNF</i>		600837	HFB1-GDNF ATF1 ATF2
<i>GEMIN4</i>		606969	DKFZP434D174 HCAP1 DKFZP434B131 HC56 p97 HHRF-1
<i>GEN1</i>		612449	Gen FLJ40869
<i>GFAP</i>		137780	FLJ45472
<i>GFER</i>		600924	ERV1 HERV1 ALR HPO1 HPO2 HSS
<i>GFI1</i>		600871	ZNF163 GFI-1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			GFI1A
<i>GFI1B</i>		604383	ZNF163B
<i>GFM1</i>		606639	GFM mtEF-G1 EGF1 EFGM
<i>GFM2</i>		606544	FLJ21661 EF-G2mt EFG2
<i>GFPT1</i>		138292	GFPT GFA GFAT1 GFAT
<i>GFRA1</i>	NM_001348099:1 NM_001382560:11 NM_001382561:10	601496	TRNR1 RETL1 GFR-ALPHA-1 GDNFR GDNFRA RET1L
<i>GGCX</i>		137167	VKCFD1
<i>GH1</i>		139250	GHN GH-N hGH-N GH
<i>GH2</i>		139240	GHV GH-V hGH-V GHL
<i>GHR</i>		600946	GHBP
<i>GHRHR</i>		139191	
<i>GHRL</i>		605353	MTLRP ghrelin obestatin
<i>GHSR</i>		601898	
<i>GIGYF2</i>		612003	PERQ3 PERQ2 PARK11 GYF2 KIAA0642 TNRC15
<i>GIPC3</i>		608792	C19orf64 DFNB95 DFNB72 DFNB15
<i>GIT1</i>		608434	
<i>GJA1</i>		121014	SDTY3 ODDD ODOD CX43 GJAL

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			ODD
<i>GJA3</i>		121015	CZP3 CX46
<i>GJA5</i>		121013	CX40
<i>GJA8</i>		600897	CX50 CAE CZP1 CAE1
<i>GJB1</i>		304040	CX32 CMTX CMTX1
<i>GJB2</i>		121011	DFNA3 DFNB1 CX26 NSRD1
<i>GJB3</i>		603324	CX31 DFNA2 EKV
<i>GJB4</i>		605425	CX30.3
<i>GJB6</i>		604418	CX30 DFNA3 HED ED2 EDH
<i>GJC2</i>		608803	GJA12 SPG44 CX47 CX46.6
<i>GJC3</i>		611925	GJE1 CX30.2
<i>GK</i>	NM_000167:19 NM_001128127:20 NM_001205019:21 NM_001399987:5,20 NM_203391:20	300474	GK1 GKD
<i>GLA</i>		300644	GALA
<i>GLB1</i>	NM_001393580:16	611458	EBP ELNR1
<i>GLCC1</i>		614283	TSSN1 FAM117C GIG18
<i>GLDC</i>		238300	GCSP NKH
<i>GLDN</i>		608603	COLM colmedin CLOM UNC-122 CRG-L2
<i>GLE1</i>		603371	hGLE1 LCCS1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			GLE1L
<i>GLI1</i>		165220	GLI
<i>GLI2</i>		165230	THP2 THP1 HPE9
<i>GLI3</i>		165240	PAPA1 ACLS GCPS PHS PAPB PAPA PAP-A PPDIV
<i>GLIS2</i>		608539	NPHP7
<i>GLIS3</i>		610192	MGC33662 ZNF515
<i>GLMN</i>		601749	FAP68 GVM FKBPAP FAP48 VMGLOM GLML
<i>GLP1R</i>		138032	GLP-1R
<i>GLRA1</i>		138491	STHE
<i>GLRA2</i>		305990	GLR
<i>GLRB</i>		138492	
<i>GLRX5</i>		609588	GRX5 PR01238 C14orf87
<i>GLUD1</i>		138130	GDH1 GDH GLUD hGDH1
<i>GLUD2</i>		300144	GLUDP1
<i>GLUL</i>	NM_002065:8 NM_001033044:7 NM_001033056:7	138290	GLNS
<i>GLYCTK</i>		610516	HBEBP4 HBEBP2
<i>GM2A</i>		613109	GM2-AP GM2AP SAP-3
<i>GMNN</i>		602842	Gem
<i>GMPPA</i>		615495	
<i>GMPPB</i>		615320	KIAA1851
<i>GNA11</i>		139313	FBH FBH2 HHC2 FHH2
<i>GNA12</i>	NM_007353:1	604394	gep

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
	NM_001293092:1		
<i>GNAI1</i>		139310	
<i>GNAI2</i>		139360	GIP GNAI2B
<i>GNAI3</i>		139370	87U6
<i>GNAL</i>		139312	
<i>GNAO1</i>		139311	G-ALPHA-o
<i>GNAQ</i>		600998	G-ALPHA-q GAQ
<i>GNAS</i>		139320	GNASXL NESP55 SgVI SCG6 GNAS1 GPSA NESP
<i>GNAT1</i>		139330	CSNBAD3
<i>GNAT2</i>		139340	ACHM4
<i>GNB1</i>		139380	
<i>GNB1L</i>		610778	GY2 WDR14
<i>GNB3</i>		139130	
<i>GNB4</i>		610863	
<i>GNB5</i>		604447	GB5
<i>GNE</i>		603824	IBM2 Uae1
<i>GNG12</i>		615405	
<i>GNL2</i>		609365	Nog2 HUMAUAANTIG Ngp-1 Nug2
<i>GNMT</i>		606628	
<i>GNPAT</i>		602744	DAPAT DHAPAT DAP-AT
<i>GNPTAB</i>		607840	GNPTA MGC4170 KIAA1208
<i>GNPTG</i>		607838	CAB56184 C16orf27 GNPTAG c316G12.3
<i>GNRH1</i>		152760	GRH LHRH GNRH
<i>GNRHR</i>		138850	GRHR LHRHR
<i>GNS</i>		607664	
<i>GOLGA2</i>	NM_001366244:3 NM_001366246:3	602580	golgin-95 GM130

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
	NM_001389695:3 NM_001389696:3 NM_001389697:3 NM_001389698:3 NM_001389699:3		
<i>GON4L</i>	NM_001282860:25,30-31 NM_001282856:25,30-31 NM_001282858:25,30-31	610393	YARP FLJ20203 GON4 GON-4
<i>GORAB</i>		607983	SCYL1BP1 FLJ11752 NTKL-BP1 GO
<i>GOSR2</i>		604027	Bos1 GS27
<i>GOT1</i>		138180	AST1
<i>GP1BA</i>		606672	CD42b GP1B GPIbalpha
<i>GP1BB</i>		138720	CD42c GPIbbeta
<i>GP6</i>		605546	GPVI
<i>GP9</i>		173515	CD42a GPIX
<i>GPATCH3</i>		617486	GPATC3 FLJ12455
<i>GPATCH8</i>		614396	GPATC8 KIAA0553
<i>GPBAR1</i>		610147	BG37 GPCR19 GPCR TGR5 MGC40597 M-BAR GPR131
<i>GPC3</i>		300037	SGBS1 SGB SDYS DGSX OCI-5 SGBS
<i>GPC6</i>		604404	
<i>GPD1</i>		138420	
<i>GPD1L</i>		611778	KIAA0089
<i>GPD2</i>		138430	
<i>GPHN</i>	NM_001377514:5,10-11 NM_001377515:9-10 NM_001377516:9-10 NM_001377517:9 NM_001377518:9	603930	KIAA1385

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
	NM_001377519:5		
<i>GPI</i>		172400	AMF NLK
<i>GPIHBP1</i>		612757	LOC338328 GPI-HBP1
<i>GPR101</i>		300393	
<i>GPR143</i>		300808	OA1
<i>GPR161</i>		612250	RE2
<i>GPR174</i>		300903	FKSG79
<i>GPR179</i>		614515	CSNB1E GPR158L1
<i>GPR180</i>		607787	ITR
<i>GPR68</i>		601404	OGR1
<i>GPR75</i>		606704	WI-31133
<i>GPR85</i>		605188	SREB2
<i>GPR88</i>		607468	
<i>GPSM2</i>		609245	LGN Pins DFNB82
<i>GPT</i>		138200	ALT1 GPT1
<i>GPT2</i>		138210	ALT2
<i>GPX1</i>		138320	
<i>GPX4</i>		138322	MCSP PHGPx
<i>GRB2</i>		108355	NCKAP2
<i>GREM1</i>		603054	HMPS CKTSF1B1 DAND2 DRM gremlin CRAC1
<i>GREM2</i>		608832	CKTSF1B2 DAND3 Prdc FLJ21195
<i>GRHL2</i>		608576	BOM DFNA28 FLJ13782 TFCP2L3
<i>GRHL3</i>		608317	SOM TFCP2L4
<i>GRHPR</i>		604296	GLXR PH2
<i>GRIA1</i>	NM_001364166:1	138248	GLURA GluA1 GLUR1
<i>GRIA3</i>		305915	GluA3 MRX94 GLUR3

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			GLURC
<i>GRID2</i>		602368	GluR-delta-2 GluD2
<i>GRIK2</i>		138244	GluK2 MRT6 GLUR6
<i>GRIK4</i>		600282	KA1 GluK4 GRIK
<i>GRIK5</i>		600283	KA2 GRIK2 GluK5
<i>GRIN1</i>		138249	NMDAR1 GluN1
<i>GRIN2A</i>		138253	NMDAR2A GluN2A
<i>GRIN2B</i>		138252	GluN2B NMDAR2B
<i>GRIN2D</i>		602717	GluN2D NR2D EB11 NMDAR2D
<i>GRIP1</i>	NM_001366722:10 NM_001366723:1 NM_001366724:1 NM_001379345:1,10 NM_001379346:10 NM_001379347:1 NM_001379348:1 NM_001379349:1 NM_001379351:1	604597	
<i>GRK1</i>		180381	GPRK1 RK RHOK
<i>GRK5</i>		600870	GPRK5
<i>GRM1</i>		604473	MGLUR1 GPRC1A PPP1R85 mGlu1
<i>GRM6</i>		604096	mGlu6 MGLUR6 CSNB1B GPRC1F
<i>GRM7</i>		604101	GLUR7 MGLUR7 PPP1R87 mGlu7 GPRC1G
<i>GRN</i>		138945	PCDGF CLN11

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			PGRN
<i>GRXCR1</i>		613283	PPP1R88 DFNB25
<i>GRXCR2</i>		615762	DFNB101
<i>GSC</i>		138890	
<i>GSDME</i>		608798	ICERE-1 DFNA5
<i>GSK3B</i>		605004	
<i>GSKIP</i>		616605	C14orf129
<i>GSN</i>		137350	DKFZp313L0718
<i>GSPT2</i>		300418	FLJ10441 eRF3b
<i>GSR</i>		138300	
<i>GSS</i>		601002	
<i>GSTM1</i>		138350	GST1 MU H-B
<i>GSTM3</i>		138390	GST5
<i>GSTO1</i>		605482	GSTTLp28 P28
<i>GSTP1</i>	NM_000852:1	134660	FAEES3 GSTP GST3
<i>GSTT1</i>		600436	
<i>GTF2E2</i>	NM_001348353:7	189964	TF2E2 FE TFIIE-B
<i>GTF2H5</i>		608780	FLJ30544 TFIIH C6orf175 bA120J8.2 TTDA TFB5 TTD TTD-A
<i>GTF2IRD1</i>		604318	GTF3 Cream1 WBSCR11 MusTRD1 BEN RBAP2 WBSCR12
<i>GTPBP2</i>		607434	
<i>GTPBP3</i>		608536	MTGP1 THDF1 MSS1 GTPBG3 FLJ14700
<i>GUCA1A</i>		600364	CORD14 GCAP

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			dJ139D8.6 GUCA GUCA1 GCAP1 COD3 C6orf131
<i>GUCA1B</i>		602275	GCAP2 RP48
<i>GUCY1A1</i>		139396	GUCY1A3 GC-SA3 GUC1A3
<i>GUCY2C</i>		601330	GUC2C STAR
<i>GUCY2D</i>		600179	LCA RETGC-1 GUC2D CORD6 retGC GUC1A4 LCA1 ROS-GC1 CYGD
<i>GUF1</i>		617064	FLJ13220
<i>GUSB</i>		611499	
<i>GYG1</i>		603942	GYG
<i>GYG2</i>		300198	GN-2
<i>GYPA</i>	NM_002099:1 NM_001308187:1 NM_001308190:1	617922	MN MNS GPA CD235a
<i>GYPC</i>		110750	GPC CD236R CD236 Ge GYPD
<i>GYS1</i>		138570	GSY GYS
<i>GYS2</i>		138571	
<i>H3-4</i>		602820	H3t H3FT HIST3H3 H3/g H3.4
<i>H6PD</i>		138090	GDH H6PDH
<i>HABP2</i>		603924	HGFAL PHBP HABP FSAP
<i>HACD1</i>		610467	PTPLA

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			CAP
<i>HACE1</i>		610876	KIAA1320
<i>HADH</i>		601609	HADH1 HADHSC SCHAD
<i>HADHA</i>		600890	MTPA GBP LCHAD LCEH
<i>HADHB</i>		143450	MTPB
<i>HAL</i>		609457	HIS
<i>HAMP</i>		606464	LEAP1 HEPC LEAP-1 HFE2B
<i>HAND1</i>		602406	Hxt Thing1 eHand bHLHa27
<i>HAND2</i>		602407	Hed dHand bHLHa26 Thing2
<i>HAO1</i>		605023	GOX1 GOX
<i>HARS1</i>		142810	USH3B HARS HisRS
<i>HARS2</i>	NM_001363535:2	600783	HARSR HO3 HARSL
<i>HAS2</i>		601636	
<i>HAS3</i>		602428	
<i>HAX1</i>		605998	HCLSBP1 HS1BP1 HAX-1
<i>HBB</i>		141900	CD113t-C beta-globin
<i>HBD</i>		142000	
<i>HBM</i>		609639	HBAP2 HBK
<i>HBS1L</i>		612450	HSPC276 KIAA1038 ERFS eRF3c DKFZp434g247 HBS1 EF-1a
<i>HCCS</i>		300056	CCHL MLS

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>HCFC1</i>		300019	MGC70925 HCF1 HCF-1 CFF PPP1R89 HFC1 MRX3 VCAF
<i>HCN1</i>		602780	BCNG1 HAC-2 BCNG-1
<i>HCN2</i>	NM_001194:1,8	602781	HAC-1 BCNG2 BCNG-2
<i>HCN3</i>		609973	KIAA1535
<i>HCN4</i>		605206	
<i>HCRT</i>		602358	OX PPOX
<i>HCRTR2</i>		602393	ORXR2 OX2R OXR2
<i>HDAC4</i>		605314	BDMR HDACA HA6116 HD4 HDAC-4 KIAA0288 HDAC-A
<i>HDAC6</i>		300272	HD6 PPP1R90 KIAA0901 FLJ16239 JM21
<i>HDAC8</i>		300269	HDACL1 KDAC8 MRXS6 RPD3 WTS
<i>HDC</i>		142704	
<i>HECW2</i>		617245	NEDL2 KIAA1301
<i>HELLS</i>		603946	Nbla10143 PASG LSH SMARCA6
<i>HELQ</i>		606769	Hel308
<i>HEPACAM</i>		611642	GLIALCAM FLJ25530
<i>HEPH</i>		300167	KIAA0698 CPL

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>HERC1</i>		605109	p532 p619
<i>HERC2</i>	NM_004667:2,27,29-30,32,44-47,52,75	605837	p528 D15F37S1 jdf2
<i>HES7</i>		608059	bHLHb37
<i>HESX1</i>		601802	RPX ANF
<i>HEXA</i>		606869	
<i>HEXB</i>		606873	
<i>HEXD</i>	NM_001369487:11	616864	HEXDC FLJ23825
<i>HFE</i>		613609	HFE1 HLA-H
<i>HFM1</i>		615684	MER3 FLJ36760 SEC63D1 FLJ39011
<i>HGD</i>		607474	HGO AKU
<i>HGF</i>		142409	HGFB F-TCF DFNB39 SF HPTA
<i>HGSNAT</i>	NM_152419:1 NM_001363227:1,15 NM_001363228:1	610453	FLJ32731 TMEM76 HGNAT
<i>HHAT</i>		605743	rasp FLJ10724 GUP2 sit ski MART2 MART-2 Skn
<i>HHIP</i>		606178	HIP FLJ20992
<i>HIBCH</i>		610690	
<i>HIF1A</i>		603348	HIF-1alpha bHLHe78 PASD8 MOP1 HIF1
<i>HIKESHI</i>		614908	C11orf73 HSPC138 OPI10 HSPC179
<i>HINT1</i>		601314	HINT PKCI-1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			PRKCNH1
<i>HINT2</i>		609997	
<i>HIVEP2</i>		143054	MBP-2 Schnurri-2 HIV-EP2 ZAS2 ZNF40B MIBP1
<i>HJV</i>		608374	RGMC JH hemojuvelin HFE2A HFE2 haemojuvelin
<i>HK1</i>		142600	
<i>HK2</i>		601125	
<i>HLA-DPB1</i>		142858	HLA-DP1B
<i>HLCS</i>	NM_001352514:1-2	609018	HCS
<i>HMBS</i>		609806	PBGD PORC UPS
<i>HMCN1</i>		608548	ARMD1 FIBL-6 FBLN6 FIBL6
<i>HMGA1</i>		600701	HMG1Y
<i>HMGA2</i>	NM_001300919:4	600698	LIPO BABL HMGIC
<i>HMGB1</i>	NM_002128:5 NM_001313892:5 NM_001313893:5 NM_001363661:5 NM_001370339:5 NM_001370340:5 NM_001370341:5	163905	DKFZp686A04236 HMG3 HMG1 SBP-1
<i>HMGB3</i>		300193	MGC90319 HMG2A HMG4
<i>HMGCL</i>		613898	HL
<i>HMGCR</i>		142910	
<i>HMGCS2</i>		600234	
<i>HMOX1</i>		141250	bK286B10 HO-1
<i>HMX1</i>		142992	NKX5-3 H6
<i>HNF1A</i>		142410	HNF1α LFB1 HNF1 TCF1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			MODY3
<i>HNF1B</i>		189907	HNF1beta VHNF1 TCF2 LFB3 HNF1β MODY5
<i>HNF4A</i>		600281	TCF14 MODY MODY1 HNF4 NR2A1
<i>HNMT</i>		605238	
<i>HNRNPA0</i>		609409	HNRPA0
<i>HNRNPA1</i>		164017	ALS20 HNRPA1 hnRNP-A1
<i>HNRNPA2B1</i>		600124	HNRPA2B1
<i>HNRNPDL</i>		607137	JKTBP laAUF1 LGMD1G HNRPDL
<i>HNRNPH1</i>	NM_001364225:15 NM_001364226:14 NM_001364227:13 NM_001364228:13 NM_001364229:13 NM_001364230:12 NM_001364232:12 NM_001364240:12 NM_001364251:12 NM_001364252:12 NM_001364253:12 NM_001395177:12 NM_001395178:13 NM_001395179:13 NM_001395180:13 NM_001395181:13	601035	hnRNPH HNRPH1
<i>HNRNPH2</i>		300610	HNRPH2 hnRNPH' FTP3 HNRPH'
<i>HNRNPK</i>		600712	HNRPK TUNP CSBP
<i>HNRNPU</i>		602869	SAF-A FLJ37978 HNRPU NCRNA00201 FLJ30202

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			HNRNPU-AS1 C1orf199
<i>HOGA1</i>		613597	DHDPS2 FLJ37472 C10orf65 DHDPSL NPL2
<i>HOMER2</i>		604799	HOMER-2 Cupidin CPD Vesl-2 HOMER-2B DFNA68 HOMER-2A
<i>HOMEZ</i>		608119	KIAA1443
<i>HOXA1</i>		142955	HOX1F HOX1
<i>HOXA10</i>		142957	HOX1 HOX1H
<i>HOXA11</i>		142958	HOX1 HOX1I
<i>HOXA13</i>		142959	HOX1J HOX1
<i>HOXA2</i>		604685	HOX1K
<i>HOXA4</i>		142953	HOX1 HOX1D
<i>HOXB1</i>		142968	HOX2 HOX2I
<i>HOXB13</i>		604607	
<i>HOXB6</i>		142961	HOX2 HOX2B
<i>HOXC13</i>		142976	HOX3G HOX3
<i>HOXD10</i>		142984	HOX4 HOX4D
<i>HOXD11</i>		142986	HOX4F HOX4
<i>HOXD13</i>		142989	SPD HOX4I
<i>HOXD4</i>		142981	HOX4 HOX4B
<i>HP</i>	NM_005143:1,3-6 NM_001126102:1,3-4 NM_001318138:1,3-4	140100	
<i>HPCA</i>		142622	DYT2
<i>HPD</i>		609695	PPD 4-HPPD 4HPPD GLOD3
<i>HPGD</i>	NM_001363574:5	601688	SDR36C1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>HPRT1</i>		308000	HGPRT HPRT
<i>HPS1</i>		604982	BLOC3S1 HPS
<i>HPS3</i>		606118	BLOC2S1 SUTAL
<i>HPS4</i>	NM_001349900:10 NM_001349901:10 NM_001349904:14 NM_001349905:14	606682	LE KIAA1667 BLOC3S2
<i>HPS5</i>		607521	RU2 BLOC2S2 AIBP63
<i>HPS6</i>		607522	FLJ22501 BLOC2S3
<i>HPSE2</i>		613469	UFS HPA2 HPR2
<i>HR</i>		602302	ALUNC AU
<i>HRAS</i>		190020	HRAS1
<i>HRG</i>		142640	HRGP HPRG
<i>HSD11B1</i>		600713	SDR26C1 HSD11B HSD11
<i>HSD11B2</i>		614232	SDR9C3
<i>HSD17B10</i>		300256	MRPP2 17b-HSD10 ABAD MRXS10 SDR5C1 CAMR HADH2 ERAB MHBD
<i>HSD17B3</i>		605573	SDR12C2
<i>HSD17B4</i>		601860	DBP SDR8C1 MFE-2
<i>HSD3B2</i>		613890	SDR11E2
<i>HSD3B7</i>		607764	SDR11E3 C(27)-3BETA-HSD
<i>HSF2</i>		140581	
<i>HSF4</i>		602438	CTM
<i>HSPA1L</i>		140559	hum70t HSP70-HOM
<i>HSPA9</i>		600548	mot-2 GRP75 HSPA9B

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			mthsp75 PBP74
<i>HSPB1</i>		602195	HSP27 CMT2F Hsp25 HSP28 Hs.76067
<i>HSPB3</i>		604624	HSPL27
<i>HSPB6</i>		610695	Hsp20 FLJ32389 PPP1R91
<i>HSPB8</i>		608014	HSP22 CMT2L H11 E2IG1
<i>HSPD1</i>	NM_002156:12 NM_199440:12	118190	GroEL HSP60 SPG13
<i>HSPE1-MOB4</i>	NM_001202485:1-2		
<i>HSPG2</i>		142461	perlecan PRCAN SJS1
<i>HSPH1</i>	NM_001349704:19	610703	HSP105B HSP105A NY-CO-25 KIAA0201
<i>HTR1A</i>		109760	ADRB2RL1 ADRBRL1 5-HT1A
<i>HTR1B</i>		182131	5-HT1B 5-HT1DB HTR1D2 S12
<i>HTR1D</i>		182133	RDC4 5-HT1D HTRL HT1DA
<i>HTR1E</i>		182132	5-HT1E
<i>HTR1F</i>		182134	5-HT1F HTR1EL
<i>HTR2A</i>		182135	5-HT2A HTR2
<i>HTR2B</i>		601122	5-HT2B 5-HT(2B)
<i>HTR2C</i>		312861	HTR1C 5-HT2C 5HTR2C
<i>HTR3A</i>		182139	5-HT3A HTR3 5-HT3R

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>HTR3B</i>		604654	5-HT3B
<i>HTR3C</i>		610121	
<i>HTR3D</i>		610122	
<i>HTR3E</i>		610123	
<i>HTR4</i>		602164	5-HT4
<i>HTR5A</i>		601305	5-HT5A
<i>HTR6</i>		601109	5-HT6R 5-HT6
<i>HTR7</i>		182137	5-HT7
<i>HTRA1</i>		602194	ARMD7 IGFBP5-protease PRSS11 HtrA
<i>HTRA2</i>		606441	PARK13 PRSS25 OMI
<i>HTT</i>		613004	HD IT15
<i>HUWE1</i>		300697	KIAA0312 UREB1 Ib772
<i>HYAL1</i>		607071	HYAL-1 LUCA1
<i>HYDIN</i>	NM_001270974:6-84 NM_001198542:6-19 NM_001198543:6-19 NM_017558:6-20	610812	PPP1R31 CILD5 DKFZp434D0513 KIAA1864
<i>HYLS1</i>		610693	FLJ32915
<i>HYOU1</i>		601746	ORP150 Grp170 HSP12A
<i>IAPP</i>		147940	IAP DAP AMYLIN
<i>IARS1</i>		600709	IARS ILRS
<i>IARS2</i>		612801	FLJ10326
<i>IBA57</i>		615316	FLJ12734 C1orf69
<i>ICOS</i>		604558	AILIM CD278
<i>ID4</i>		600581	bHLHb27
<i>IDE</i>		146680	
<i>IDH1</i>		147700	
<i>IDH2</i>		147650	IDH-2
<i>IDH3A</i>		601149	
<i>IDH3B</i>		604526	RP46
<i>IDH3G</i>	NM_174869:2-12 NM_004135:2-13	300089	
<i>IDS</i>	NM_000202:2-3	300823	ID2S

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
	NM_001166550:2-3 NM_006123:2-3		SIDS
<i>IDUA</i>		252800	MPSI MPS1
<i>IER3IP1</i>		609382	
<i>IFIH1</i>		606951	MDA-5 MDA5 Hlcd IDDM19
<i>IFITM5</i>		614757	BRIL DSPA1 Hrmp1 fragilis4
<i>IFNAR2</i>	NM_001385055:10	602376	IFNABR
<i>IFNG</i>		147570	
<i>IFNGR1</i>	NM_001363526:2	107470	CD119 IFNGR
<i>IFNGR2</i>		147569	AF-1 IFNGT1
<i>IFNL3</i>	NM_001346937:1	607402	IL28B IL28C IL-28B
<i>IFNL4</i>		615090	IFNAN
<i>IFT122</i>	NM_052985:15 NM_001280541:14 NM_001280545:15 NM_001280546:12 NM_018262:13 NM_052989:14 NM_052990:11	606045	FAP80 WDR10 SPG WDR140 WDR10p
<i>IFT140</i>		614620	gs114 WDTC2 KIAA0590
<i>IFT172</i>		607386	osm-1 BBS20 wim NPHP17 SLB
<i>IFT27</i>		615870	RAYL RABL4 BBS19 FAP156
<i>IFT43</i>		614068	C14orf179 FLJ32173 MGC16028
<i>IFT52</i>		617094	C20orf9 NGD5 NGD2 dJ1028D15.1 CGI-53

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>IFT74</i>	NM_001349928:20	608040	CCDC2 CMG-1 CMG1 FLJ22621
<i>IFT80</i>		611177	KIAA1374 WDR56 FAP167
<i>IFT81</i>		605489	CDV1 CDV-1R MGC4027
<i>IGBP1</i>		300139	IBP1 α4
<i>IGF1</i>		147440	IGF1A IGF IGFI IGF-I
<i>IGF1R</i>		147370	MGC18216 IGFIR JTK13 CD221 IGFR
<i>IGF2</i>		147470	IGF-II FLJ44734 C11orf43
<i>IGF2R</i>	NM_000876:1	147280	CI-M6PR MPR1 CI-MPR CD222 MPRI M6P-R MPR300 CIMPR
<i>IGFALS</i>		601489	ALS
<i>IGFBP7</i>		602867	PSF IGFBP-7 MAC25 FSTL2
<i>IGHMBP2</i>		600502	CMT2S SMUBP2 CATF1 SMARD1 HMN6 HCSA ZFAND7
<i>IGLL1</i>		146770	IGLL CD179B 14.1 IGL5 IGVPB
<i>IGSF1</i>		300137	INHBP

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			PGSF2 MGC75490 IGCD1 IGDC1 KIAA0364
<i>IGSF10</i>		617351	CMF608 FLJ25972
<i>IGSF3</i>		603491	EWI-3 MGC117164 V8
<i>IHH</i>		600726	BDA1 HHG2
<i>IKBKB</i>		603258	IKKB IKK-beta IKK2 NFKBIKB
<i>IKBKG</i>	NM_001099857:3-10 NM_001099856:3-10 NM_001145255:3-8 NM_001321396:3-10 NM_001321397:3-10 NM_001377312:3-10 NM_001377313:3-10 NM_001377314:3-9 NM_001377315:3-7 NM_003639:3-10	300248	IKK-gamma NEMO IKKAP1 ZC2HC9 Fip3p IP2 FIP-3 FIP3 IKKG IP1
<i>IKZF1</i>		603023	IKAROS PPP1R92 ZNFN1A1 hIk-1 LyF-1 Hs.54452
<i>IL10</i>		124092	TGIF IL10A CSIF IL-10
<i>IL10RA</i>		146933	CDW210A CD210a HIL-10R IL10R CD210
<i>IL10RB</i>		123889	CRF2-4 CRFB4 D21S58 D21S66 IL-10R2 CDW210B
<i>IL11RA</i>		600939	
<i>IL12B</i>		161561	NKSF2 IL-12B

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			CLMF NKSF CLMF2
<i>IL12RB1</i>		601604	IL12RB CD212
<i>IL12RB2</i>		601642	
<i>IL17F</i>		606496	ML1 IL-17F ML-1
<i>IL17RA</i>		605461	CD217 IL17R IL-17RA hIL-17R CDw217
<i>IL17RC</i>		610925	IL17-RL
<i>IL17RD</i>		606807	SEF IL-17RD FLJ35755 IL17RLM
<i>IL18RAP</i>		604509	AcPL CD218b
<i>IL1R2</i>		147811	CD121b IL1RB
<i>IL1RAPL1</i>		300206	IL1RAPL MRX34 OPHN4 IL1R8 TIGIRR-2 MRX10 MRX21
<i>IL1RN</i>		147679	IRAP IL-1RN IL1RA MGC10430 ICIL-1RA IL1F3
<i>IL21</i>		605384	IL-21 Za11
<i>IL21R</i>		605383	CD360
<i>IL23R</i>		607562	IL-23R
<i>IL27RA</i>		605350	zcytor1 TCCR WSX1 IL-27R CRL1 WSX-1
<i>IL2RA</i>		147730	IDDM10 CD25 IL2R
<i>IL2RG</i>		308380	IMD4

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			CIDX SCIDX1 CD132
<i>IL31RA</i>		609510	CRL GLM-R Glmr IL-31RA CRL3
<i>IL36RN</i>		605507	IL1HY1 FIL1(Delta) IL1RP3 MGC29840 IL36RA FIL1 IL1L1 FIL1D IL1F5 IL-1F5
<i>IL6</i>		147620	HGF BSF2 IFNB2 IL-6 HSF
<i>IL7</i>		146660	IL-7
<i>IL7R</i>		146661	CD127 IL7RA
<i>ILDR1</i>		609739	MGC50831 DFNB42
<i>ILK</i>		602366	
<i>IMPA1</i>		602064	IMPA
<i>IMPDH1</i>		146690	LCA11 sWSS2608 RP10
<i>IMPDH2</i>		146691	
<i>IMPG1</i>		602870	GP147 IPM150 SPACR
<i>IMPG2</i>		607056	RP56 IPM200 SPACRCAN
<i>INF2</i>		610982	C14orf173 MGC13251 C14orf151
<i>ING1</i>		601566	p24ING1c p47ING1a p33ING1 p33ING1b p47 p33
<i>INHA</i>		147380	

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>INHBA</i>		147290	
<i>INO80</i>		610169	INO80A KIAA1259 hINO80 INOC1
<i>INO80D</i>		619207	FLJ20309
<i>INPP4A</i>		600916	INPP4
<i>INPP5E</i>		613037	JBTS1 CORS1 pharbin PPI5PIV
<i>INPP5K</i>		607875	SKIP
<i>INPL1</i>		600829	SHIP2
<i>INS</i>		176730	IDDM2 IDDM1
<i>INS-IGF2</i>	NM_001042376:3-4		
<i>INSIG2</i>		608660	
<i>INSL3</i>	NM_001265587:2	146738	RLF RLNL MGC119819 MGC119818
<i>INSR</i>		147670	CD220
<i>INSRR</i>	NM_014215:1-18,20-22	147671	IRR
<i>INTU</i>		610621	PDZD6 CPLANE4 KIAA1284 PDZK6
<i>INVS</i>		243305	NPHP2
<i>IP6K3</i>		606993	IHPK3 INSP6K3
<i>IPCEF1</i>	NM_001130699:4-5,7-13 NM_001130700:3-4,6-12 NM_001394799:4-5,7-13 NM_001394800:3-4,6-12 NM_001394801:4-5,7-13 NM_001394802:3-4,6-12 NM_015553:3-4,6-12		PIP3-E KIAA0403
<i>IPMK</i>		609851	
<i>IQCB1</i>		609237	NPHP5 SLSN5 KIAA0036
<i>IQCK</i>			MGC35048 FLJ36575
<i>IQGAP1</i>		603379	p195 KIAA0051 HUMORFA01 SAR1
<i>IQGAP2</i>		605401	
<i>IQGAP3</i>			
<i>IQSEC2</i>		300522	KIAA0522

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			MRX78 MRX18 IQ-ArfGEF BRAG1 MRX1
<i>IRAK3</i>		604459	IRAK-M
<i>IRAK4</i>		606883	NY-REN-64
<i>IRF1</i>		147575	MAR
<i>IRF2BP2</i>		615332	IRF-2BP2
<i>IRF3</i>		603734	
<i>IRF6</i>		607199	LPS VWS1 OFC6 VWS
<i>IRF7</i>		605047	
<i>IRF8</i>	NM_001363907:1	601565	IRF-8 ICSBP ICSBP1
<i>IRGM</i>		608212	IRGM1 IFI1 LRG-47 LRG47
<i>IRS1</i>		147545	HIRS-1
<i>IRS2</i>		600797	
<i>IRX5</i>		606195	IRX-2a
<i>ISCA2</i>		615317	HBLD1 ISA2
<i>ISCU</i>		611911	NIFUN hnifU ISU2
<i>ISG15</i>		147571	G1P2 IFI15 UCRP
<i>ISL1</i>		600366	ISLET1 Isl-1
<i>ITCH</i>	NM_001257137:7 NM_001324197:7	606409	AIP4
<i>ITGA2</i>		192974	CD49B CD49b
<i>ITGA2B</i>		607759	PPP1R93 CD41 GP2B CD41B
<i>ITGA3</i>		605025	MSK18 GAP-B3 VLA3a VCA-2 CD49c
<i>ITGA4</i>		192975	CD49d CD49D

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>ITGA6</i>		147556	CD49f
<i>ITGA7</i>		600536	
<i>ITGA8</i>		604063	
<i>ITGA9</i>		603963	RLC ALPHA-RLC ITGA4L
<i>ITGAM</i>		120980	CD11B CR3A MAC-1 CD11b
<i>ITGB2</i>		600065	MAC-1 MFI7 LFA-1 CD18
<i>ITGB3</i>		173470	CD61 GP3A GPIIIa
<i>ITGB4</i>		147557	CD104
<i>ITGB6</i>		147558	
<i>ITIH4</i>		600564	ITIH1 IHRP H4P
<i>ITK</i>		186973	LYK PSCTK2 EMT
<i>ITM2B</i>		603904	BRI BRICD2B E3-16 BRI2 E25B
<i>ITPA</i>		147520	C20orf37 dJ794I6.3 HLC14-06-P
<i>ITPR1</i>		147265	IP3R1 SCA16 ACV Insp3r1 PPP1R94 SCA15 SCA29
<i>ITPR2</i>		600144	IP3R2 CFAP48
<i>ITSN1</i>		602442	ITSN SH3P17 SH3D1A MGC134949 MGC134948
<i>IVD</i>	NM_001354597:1 NM_001354598:12-13 NM_001354600:12-13	607036	ACAD2 IVDH

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
	NM_001354601:12		
<i>IVNS1ABP</i>		609209	KLHL39 ND1 NS1-BP KIAA0850 ARA3 NS-1 HSPC068
<i>IYD</i>		612025	DEHAL1 C6orf71 dJ422F24.1
<i>JAG1</i>		601920	CD339 AGS AHD HJ1 JAGL1 AWS
<i>JAGN1</i>		616012	FLJ14602 GL009
<i>JAK2</i>		147796	JTK10
<i>JAK3</i>		600173	L-JAK JAK3_HUMAN LJAK JAK-3 JAKL
<i>JAM3</i>		606871	JAM-C JAMC
<i>JMJD1C</i>		604503	DKFZp761F0118 KIAA1380 TRIP8 KDM3C FLJ14374
<i>JPH1</i>		605266	JP-1
<i>JPH2</i>		605267	JP-2
<i>JPH3</i>		605268	HDL2 JP-3 TNRC22 JP3 CAGL237
<i>JUP</i>		173325	DP3 PKGB DP111 PG PDGB CTNNG
<i>KAAG1</i>		608211	RU2 RU2AS
<i>KALRN</i>	NM_001388417:1 NM_001388418:1 NM_001388419:1	604605	TRAD Kalirin ARHGEF24

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			duo HAIIP DUET Hs.8004
<i>KANK1</i>		607704	KANK ANKRD15 KIAA0172
<i>KANK2</i>		614610	ANKRD25 MXRA3 KIAA1518
<i>KANK4</i>		614612	KIAA0172 ANKRD38
<i>KANSL1</i>		612452	MSL1v1 CENP-36 DKFZP727C091 KIAA1267 NSL1
<i>KARS1</i>		601421	KARS DFNB89 KARS2
<i>KAT6A</i>		601408	MOZ MYST3 ZC2HC6A ZNF220 RUNXBP2
<i>KAT6B</i>		605880	MOZ2 MYST4 querkopf ZC2HC6B qkf Morf
<i>KAT7</i>		609880	MYST2 ZC2HC7 HBO1 HBOA
<i>KAT8</i>		609912	MOF ZC2HC8 MYST1 hMOF FLJ14040
<i>KATNAL2</i>	NM_001353899:2-4 NM_001353900:2-4 NM_001353901:3-4,16 NM_001353902:2-4,15 NM_001353905:16 NM_001353906:13 NM_001353907:13-14 NM_001353908:12 NM_001353909:12 NM_001367621:1-2 NM_001387690:3-4	614697	DKFZP667C165 MGC33211

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>KATNB1</i>		602703	
<i>KATNIP</i>		616650	JBTS26 KIAA0556
<i>KBTBD13</i>		613727	NEM6 hCG_1645727
<i>KCNA1</i>		176260	Kv1.1 AEMK MBK1 HUK1 RBK1
<i>KCNA2</i>		176262	Kv1.2 HK4
<i>KCNA4</i>		176266	HK1 KCNA4L PCN2 Kv1.4 HPCN2
<i>KCNA5</i>		176267	HPCN1 Kv1.5 HK2
<i>KCNAB1</i>		601141	hKvBeta3 hKvb3 Kvb1.3 AKR6A3 KCNA1B
<i>KCNAB2</i>		601142	KCNA2B AKR6A5 HKvbeta2.1 HKvbeta2.2
<i>KCNB1</i>		600397	Kv2.1
<i>KCNB2</i>		607738	Kv2.2
<i>KCNC1</i>		176258	Kv3.1
<i>KCNC3</i>		176264	SCA13 Kv3.3
<i>KCND2</i>		605410	RK5 Kv4.2 KIAA1044
<i>KCND3</i>		605411	SCA19 SCA22 Kv4.3 KSHIVB
<i>KCNE1</i>		176261	minK LQT5 JLNS2 IsK
<i>KCNE2</i>		603796	MiRP1 LQT6
<i>KCNE3</i>		604433	MiRP2 HOKPP
<i>KCNE4</i>		607775	MiRP3

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>KCNE5</i>		300328	KCNE1L
<i>KCNH1</i>		603305	h-eag hEAG Kv10.1 eag1 eag
<i>KCNH2</i>		152427	LQT2 erg1 Kv11.1 HERG
<i>KCNH5</i>		605716	eag2 hEAG2 H-EAG2 Kv10.2
<i>KCNH7</i>		608169	erg3 HERG3 Kv11.3
<i>KCNIP4</i>	NM_001363504:1	608182	CALP MGC44947 KCHIP4
<i>KCNJ1</i>		600359	ROMK1 Kir1.1
<i>KCNJ10</i>		602208	Kir1.2 Kir4.1
<i>KCNJ11</i>		600937	Kir6.2 BIR
<i>KCNJ13</i>		603208	Kir1.4 LCA16 Kir7.1
<i>KCNJ16</i>		605722	BIR9 Kir5.1
<i>KCNJ2</i>		600681	IRK1 LQT7 Kir2.1
<i>KCNJ5</i>		600734	LQT13 Kir3.4 CIR GIRK4 KATP1
<i>KCNJ6</i>		600877	BIR1 GIRK2 Kir3.2 hiGIRK2 KATP2 KCNJ7
<i>KCNJ8</i>		600935	Kir6.1
<i>KCNK17</i>		607370	TALK2 TALK-2 TASK4 K2p17.1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			TASK-4
<i>KCNK18</i>		613655	TRESK-2 K2p18.1 TRIK TRESK2 TRESK
<i>KCNK3</i>		603220	K2p3.1 TASK1 TASK TASK-1
<i>KCNK9</i>		605874	K2p9.1 TASK-3 TASK3
<i>KCNMA1</i>		600150	KCa1.1 mSLO1 SLO
<i>KCNN4</i>		602754	KCa3.1 hIKCa1 IK hSK4 hKCa4
<i>KCNQ1</i>		607542	KCNA9 KCNA8 LQT LQT1 JLNS1 Kv7.1 KVLQT1
KCNQ2	NM_001382235:15	602235	HNSPC KCNA11 BFNC Kv7.2 ENB1 EBN EBN1
KCNQ3		602232	EBN2 Kv7.3
KCNQ4		603537	Kv7.4 DFNA2
KCNS1		602905	Kv9.1
KCNS2		602906	Kv9.2
KCNT1		608167	SLACK Slo2.2 KIAA1422 KCa4.1
KCNV2		607604	Kv8.2
KCTD1		613420	C18orf5
KCTD17		616386	FLJ12242
KCTD3		613272	NY-REN-45
KCTD7	NM_001167961:5	611725	FLJ32069

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			CLN14 EPM3
KDM1A		609132	LSD1 KDM1 AOF2 KIAA0601 BHC110
KDM5A		180202	RBBP2 JARID1A
KDM5B		605393	CT31 RBBP2H1A PPP1R98 PLU-1 JARID1B
KDM5C	NM_001353979:26 NM_001353981:26 NM_001353982:26 NM_001353984:26	314690	SMCX JARID1C MRX13 DXS1272E XE169
KDM6A		300128	UTX
KDM6B		611577	JMJD3 KIAA0346
KDR		191306	VEGFR2 CD309 VEGFR FLK1
KEAP1		606016	MGC20887 MGC4407 MGC9454 MGC1114 KLHL19 KIAA0132 INrf2 MGC10630
<i>KEL</i>		613883	ECE3 CD238
<i>KERA</i>		603288	SLRR2B CNA2
<i>KHDC3L</i>		611687	C6orf221 ECAT1
<i>KHK</i>		614058	
<i>KIAA0586</i>	NM_001244189:33 NM_001329944:31 NM_001364700:30	610178	JBTS23 Talpid3
<i>KIAA0753</i>		617112	OFIP MNR
<i>KIAA0895</i>	NM_001100425:2-7 NM_001199706.2:all NM_001199707.2:all NM_001199708.2:all	619896	

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
	NM_001300956.2:all NM_015314.3:all		
<i>BLTP1</i>	NM_001384125:62,67	611565	KIAA1371 KIAA1109 FSA Tweek FLJ21404
<i>KIAA1549</i>	NM_001164665:1 NM_020910:1	613344	
<i>KIDINS220</i>	NM_001348738:29 NM_001348739:28 NM_001348740:28 NM_001348741:28 NM_001348742:28 NM_001348743:28 NM_001348745:23	615759	ARMS
<i>KIF11</i>		148760	TRIP5 Eg5 HKSP KNSL1
<i>KIF14</i>		611279	KIAA0042
<i>KIF17</i>		605037	OSM-3 KLP-2 KIF17B KIF3X KIAA1405
<i>KIF1A</i>	NM_001379635:38 NM_001379636:36 NM_001379638:38 NM_001379639:37 NM_001379646:38	601255	ATSV SPG30 UNC104 C2orf20
<i>KIF1B</i>	NM_001365951:10,14 NM_001365952:10,14	605995	HMSNII KIAA0591 CMT2 KLP CMT2A
<i>KIF1C</i>		603060	SPG58 SPAX2 SAX2
<i>KIF21A</i>		608283	FLJ20052 FEOM1
<i>KIF22</i>		603213	OBP-1 Kid OBP-2 KNSL4
<i>KIF23</i>	NM_001367805:8	605064	MKLP-1 KNSL5 MKLP1
<i>KIF26B</i>		614026	FLJ10157
<i>KIF2A</i>		602591	HK2

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			KIF2
<i>KIF4A</i>		300521	FLJ12655 FLJ12530 MRX100 HSA271784 KIF4-G1 FLJ20631 KIF4 FLJ14204
<i>KIF5A</i>		602821	MY050 SPG10 NKHC D12S1889
<i>KIF5C</i>		604593	NKHC2
<i>KIF6</i>	NM_001351503:4 NM_001351566:10	613919	dJ137F1.4 dJ1043E3.1 dJ188D3.1 MGC33317 DKFZp451I2418 C6orf102
<i>KIF7</i>		611254	JBTS12
<i>KIFBP</i>		609367	DKFZP586B0923 KBP KIAA1279 KIF1BP TTC20
<i>KIRREL3</i>		607761	NEPH2 KIRRE KIAA1867
<i>KISS1</i>		603286	
<i>KISS1R</i>		604161	HOT7T175 AXOR12 GPR54
<i>KIT</i>		164920	SCFR CD117 PBT C-Kit
<i>KITLG</i>		184745	Kitl SF SLF DFNA69 MGF FPH2 KL-1 SCF
<i>KIZ</i>		615757	HT013 C20orf19 PLK1S1 NCRNA00153
<i>KL</i>		604824	KLA

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>KLC2</i>		611729	FLJ12387
<i>KLC4</i>			KNSL8 bA387M24.3
<i>KLF1</i>		600599	EKLF
<i>KLF10</i>		601878	EGRA TIEG1 TIEG
<i>KLF11</i>		603301	MODY7 TIEG2 Tieg3 FKLF
<i>KLF6</i>		602053	ST12 COPEB BCD1 PAC1 Zf9 CPBP GBF
<i>KLF8</i>		300286	ZNF741 DXS741 BKLF3
<i>KLHDC8B</i>		613169	MGC35097
<i>KLHL1</i>		605332	FLJ30047 KIAA1490 MRP2
<i>KLHL10</i>		608778	FLJ32662
<i>KLHL15</i>		300980	KIAA1677
<i>KLHL24</i>	NM_001349413:6 NM_001349414:6 NM_001349415:5 NM_001349416:6 NM_001349417:7 NM_001349418:7 NM_001349428:4 NM_001349429:4	611295	FLJ20059 DRE1
<i>KLHL3</i>		605775	KIAA1129
<i>KLHL40</i>		615340	NEM8 SRYP KBTBD5
<i>KLHL41</i>		607701	Krp1 KBTBD10 SARCOSIN
<i>KLHL7</i>		611119	SBBI26 RP42 KLHL6
<i>KLHL9</i>		611201	KIAA1354 FLJ13568
<i>KLK1</i>		147910	Klk6
<i>KLK12</i>		605539	KLK-L5
<i>KLK4</i>		603767	EMSP1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			PRSS17 PSTS EMSP KLK-L1
<i>KLKB1</i>		229000	KLK3
<i>KLLN</i>		612105	killin
<i>KMT2A</i>		159555	MLL1 MLL HTRX1 ALL-1 CXXC7 ALL1 MLL1A HTRX TRX1 HRX
<i>KMT2B</i>	NM_014727:1	606834	WBP7 MLL1B MLL4 CXXC10 KIAA0304 MLL2 HRX2 TRX2
<i>KMT2C</i>	NM_170606:7,19	606833	HALR MLL3 KIAA1506
<i>KMT2D</i>		602113	MLL4 TNRC21 MLL2 ALR CAGL114
<i>KMT5B</i>	NM_001363566:11	610881	CGI-85 SUV420H1
<i>KNG1</i>		612358	HK BK HMWK BDK KNG
<i>KNL1</i>	NM_170589:7-8 NM_144508:7	609173	hKNL-1 PPP1R55 KIAA1570 Spc7 AF15Q14 MCPH4 hSpc105 CASC5 CT29 D40
<i>KPNA7</i>		614107	IPOA8

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>KPTN</i>		615620	2E4 KICS4
<i>KRAS</i>		190070	K-Ras4B KRAS2 KRAS1
<i>KREMEN1</i>		609898	KRM1 KREMEN
<i>KRIT1</i>		604214	CAM CCM1
<i>KRT1</i>		139350	EHK1 KRT1A
<i>KRT10</i>		148080	CK10 KPP K10
<i>KRT12</i>		601687	K12
<i>KRT13</i>		148065	K13 CK13 MGC161462 MGC3781
<i>KRT14</i>		148066	EBS3 EBS4
<i>KRT16</i>		148067	NEPPK
<i>KRT17</i>		148069	PCHC1
<i>KRT18</i>		148070	
<i>KRT2</i>		600194	KRTE KRT2A
<i>KRT25</i>		616646	KRT25A
<i>KRT3</i>		148043	K3 CK3
<i>KRT4</i>		123940	CYK4 K4 CK4
<i>KRT5</i>		148040	CK-5 KRT5A EBS2
<i>KRT6A</i>	NM_005554:1,6	148041	CK6D K6D KRT6D CK6C KRT6C K6C
<i>KRT6B</i>	NM_005555:1	148042	KRTL1
<i>KRT6C</i>	NM_173086:1,6	612315	KRT6E
<i>KRT71</i>		608245	KRT6IRS K6IRS1 KRT6IRS1
<i>KRT74</i>		608248	KRT5C KRT6IRS4 K6IRS4
<i>KRT8</i>		148060	CYK8

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			CK8 K2C8 KO CK-8 CARD2 K8
<i>KRT81</i>	NM_002281:1-3	602153	KRTHB1 Hb-1
<i>KRT83</i>		602765	KRTHB3 Hb-3
<i>KRT85</i>		602767	KRTHB5 Hb-5
<i>KRT86</i>	NM_001320198:3-5	601928	Hb6 KRTHB6 MNX
<i>KRT9</i>		607606	K9 CK-9 EPPK
<i>KSR2</i>		610737	FLJ25965
<i>KY</i>		605739	FLJ33207
<i>KYNU</i>		605197	
<i>L1CAM</i>		308840	CAML1 MASA CD171 S10 NCAM-L1 MIC5 HSAS SPG1 HSAS1
<i>L2HGDH</i>		609584	C14orf160 FLJ12618
<i>LACC1</i>	NM_001350643:6 NM_001350648:6	613409	C13orf31 FAMIN FLJ38725
<i>LAMA1</i>		150320	LAMA
<i>LAMA2</i>		156225	LAMM
<i>LAMA3</i>		600805	epiligrin LAMNA nicein-150kDa kalinin-165kDa BM600-150kDa
<i>LAMA4</i>		600133	LAMA3
<i>LAMA5</i>		601033	
<i>LAMB1</i>		150240	CLM
<i>LAMB2</i>		150325	LAMS NPHS5
<i>LAMB3</i>		150310	nicein-125kDa LAMNB1 BM600-125kDa

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			kalinin-140kDa
<i>LAMC1</i>		150290	LAMB2
<i>LAMC2</i>		150292	EBR2A nicein-100kDa EBR2 BM600-100kDa kalinin-105kDa LAMB2T LAMNB2
<i>LAMC3</i>		604349	DKFZp434E202
<i>LAMP2</i>		309060	CD107b
<i>LAMTOR2</i>		610389	p14 Ragulator2 ROBLD3 MAPKSP1AP MAPBPIP ENDAP
<i>LARGE1</i>	NM_001378630:1 NM_001378631:1	603590	LARGE KIAA0609
<i>LARP7</i>		612026	PIP7S HDCMA18P DKFZP564K112
<i>LARS1</i>		151350	LEUS FLJ10595 RNTLS FLJ21788 HSPC192 LARS
<i>LARS2</i>		604544	KIAA0028 LEURS MGC26121 mtLeuRS
<i>LAS1L</i>	NM_001375329:12 NM_001375330:12 NM_001375331:11 NM_001375334:12 NM_001375335:12 NM_001375336:11 NM_001375337:11	300964	FLJ12525 Las1
<i>LAT</i>		602354	LAT1
<i>LBHD1</i>	NM_001394599:2-7 NM_001367940.1:all NM_001367941.1:all NM_001394596:2-7 NM_001394601:2-5 NM_001394604.1:all NM_001394606:2-5 NM_001394607.1:all NM_001394609.1:all NM_001394611.1:all		MGC2477 C11orf48

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
	NM_001394612.1:all NM_024099.3:all		
<i>LBR</i>		600024	TDRD18 DHCR14B
<i>LCA5</i>		611408	C6orf152
<i>LCAT</i>		606967	
<i>LCK</i>		153390	
<i>LCT</i>		603202	
<i>LDB3</i>		605906	ZASP KIAA0613 CMD1C PDLIM6
<i>LDHA</i>		150000	
<i>LDHB</i>		150100	
<i>LDLR</i>		606945	LDLCQ2
<i>LDLRAP1</i>		605747	MGC34705 DKFZp586D0624 ARH2 FHCB2 FHCB1 ARH
<i>LEF1</i>		153245	TCF1ALPHA TCF7L3 TCF10
<i>LEFTY2</i>	NM_003240:3 NM_001172425:4	601877	EBAF LEFTYA TGFB4 LEFTA
<i>LEMD2</i>		616312	NET25 LEM2 dJ482C21.1
<i>LEMD3</i>		607844	MAN1
<i>LEP</i>		164160	OBS OB
<i>LEPR</i>	NM_002303:5 NM_001003679:5 NM_001003680:5 NM_001198687:4 NM_001198688:4 NM_001198689:4	601007	CD295 OBR
<i>LFNG</i>	NM_001040167:1 NM_001040168:1	602576	SCDO3
<i>LGI1</i>		604619	ETL1 EPITEMPIN EPT IB1099
<i>LGI4</i>		608303	
<i>LGR4</i>		606666	GPR48
<i>LHB</i>		152780	CGB4 LSH-B

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			hLHB
<i>LHCGR</i>		152790	LCGR LGR2 ULG5 HHG LHR
<i>LHFPL5</i>		609427	dJ51008.8 DFNB67 Tmhs MGC33835
<i>LHX1</i>		601999	LIM1 LIM-1
<i>LHX3</i>	NM_001363746:1	600577	
<i>LHX4</i>		602146	Gsh4
<i>LIAS</i>		607031	LAS
<i>LIF</i>		159540	CDF DIA HILDA
<i>LIFR</i>		151443	CD118
<i>LIG1</i>		126391	hLig1 LIG1
<i>LIG4</i>	NM_001352604:2	601837	
<i>LIM2</i>		154045	MP17 MP19
<i>LIMK1</i>		601329	LIMK
<i>LIMS2</i>		607908	PINCH2 PINCH-2
<i>LIN7B</i>		612331	VELI2 MALS-2 LIN-7B
<i>LINC02210-CRHR1</i>			
<i>LINS1</i>		610350	WINS1 LINS MRT27
<i>LIPA</i>		613497	CESD LAL
<i>LIPC</i>		151670	HTGL HL
<i>LIPE</i>		151750	HSL
<i>LIPG</i>		603684	EDL
<i>LIPH</i>		607365	mPA-PLA1 mPA-PLA1alpha LPDLR PLA1B
<i>LIP1</i>		609252	PLA1C PRED5 LPDL CT17 mPA-PLA1beta
<i>LIPN</i>		613924	bA186014.3

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			LIPL4
<i>LIPT1</i>		610284	MGC13378 MGC12290
<i>LITAF</i>		603795	PIG7 TP53I7 FLJ38636 SIMPLE
<i>LLGL1</i>		600966	LLGL Mgl1 HUGL-1 DLG4 Lgl1 HUGL
<i>LMAN1</i>		601567	FMFD1 MCFD1 ERGIC-53 gp58 F5F8D ERGIC53 MR60
<i>LMAN2L</i>		609552	VIPL DKFZp564L2423
<i>LMBR1</i>	NM_001350953:10 NM_001363409:10	605522	FLJ11665 C7orf2 ZRS ACHP
<i>LMBRD1</i>		612625	cbIF FLJ11240 C6orf209 bA810I22.1
<i>LMF1</i>	NM_001352018:4	611761	TMEM112A FLJ22302 C16orf26 TMEM112 JFP11 FLJ12681
<i>LMNA</i>		150330	HGPS PRO1 LMNL1 LMN1 CMD1A MADA LGMD1B
<i>LMNB1</i>		150340	
<i>LMNB2</i>	NM_032737:1	150341	LMN2
<i>LMOD3</i>		616112	
<i>LMX1B</i>		602575	NPS1
<i>LONP1</i>		605490	PRSS15 hLON LonHS

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			PIM1
<i>LORICRIN</i>		152445	LOR
<i>LOX</i>		153455	
<i>LOXHD1</i>		613072	DFNB77 FLJ32670 LH2D1
<i>LOXL1</i>		153456	LOXL LOL
<i>LOXL3</i>		607163	
<i>LPA</i>	NM_005577:3-16,30	152200	Lp(a) LP
<i>LPAR6</i>		609239	P2RY5 P2Y5
<i>LPIN1</i>	NM_001349200:13 NM_001349201:12	605518	KIAA0188
<i>LPIN2</i>		605519	KIAA0249
<i>LPIN3</i>		605520	SMP2 LIPN3L
<i>LPL</i>	NM_000237:10	609708	LIPD
<i>LPP</i>		600700	
<i>LRAT</i>		604863	LCA14
<i>LRBA</i>		606453	LAB300 CDC4L LBA BGL
<i>LRIG2</i>		608869	KIAA0806
<i>LRIT3</i>		615004	FLJ44691 FIGLER4 CSNB1F
<i>LRMDA</i>		614537	CDA017 C10orf11 OCA7
<i>LRP1</i>		107770	IGFBP-3R CD91 A2MR LRP IGFBP3R1 LRP1A APOER APR
<i>LRP2</i>		600073	gp330 DBS
<i>LRP4</i>		604270	SOST2 MEGF7 CLSS LRP-4
<i>LRP5</i>		603506	VBCH2 OPTA1 OPPG LRP7

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			EVR4 BMND1 EVR1 HBM OPS LR3
<i>LRP6</i>		603507	ADCAD2
<i>LRPAP1</i>		104225	RAP HBP44 A2MRAP
<i>LRPPRC</i>		607544	LRP130 LSFC GP130
<i>LRRC10</i>		610846	LRRC10A HRLRRP
<i>LRRC8A</i>		608360	KIAA1437 FLJ10337 LRRC8 SWELL1
<i>LRRK1</i>		610986	FLJ23119 KIAA1790 RIPK6 ROC01
<i>LRRK2</i>		609007	PARK8 FLJ45829 DKFZp434H2111 ROC02 RIPK7
<i>LRRTM4</i>		610870	FLJ12568
<i>LRSAM1</i>		610933	CMT2P RIFLE FLJ31641 TAL
<i>LRTOMT</i>		612414	LRRC51 COMT2 DFNB63 LRTOMT2 LRTOMT1 CFAP111
<i>LSS</i>		600909	OSC
<i>LTBP2</i>		602091	LTBP3 C14orf141
<i>LTBP3</i>		602090	LTBP2
<i>LTBP4</i>		604710	FLJ90018 LTBP-4L FLJ46318 LTBP-4
<i>LTC4S</i>		246530	MGC33147
<i>LUM</i>		600616	SLRR2D LDC

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>LY96</i>		605243	MD-2
<i>LYN</i>		165120	JTK8
<i>LYRM4</i>		613311	CGI-203 C6orf149 ISD11
<i>LYRM7</i>		615831	MZM1L C5orf31 FLJ20796
<i>LYST</i>		606897	CHS1 Mauve CHS
<i>LYZ</i>		153450	
<i>LZTFL1</i>		606568	BBS17
<i>LZTR1</i>		600574	BTBD29 LZTR-1
<i>LZTS1</i>		606551	FEZ1
<i>MAB21L2</i>		604357	
<i>MACF1</i>	NM_001394062:1,4,37-41,95,97,99 NM_001397473:1	608271	KIAA0754 MACF ACF7 ABP620 KIAA0465 KIAA1251 FLJ46776 FLJ45612 Lnc-PMIF
<i>MAD1L1</i>		602686	HsMAD1 MAD1 PIG9 TXBP181 TP53I9
<i>MAD2L2</i>		604094	REV7 POLZ2 MAD2B FANCV
<i>MADD</i>	NM_001376571:34 NM_001376572:34 NM_001376574:33 NM_001376575:33 NM_001376576:33 NM_001376577:33 NM_001376578:33 NM_001376579:32 NM_001376581:34 NM_001376583:32 NM_001376585:33 NM_001376586:33 NM_001376595:33 NM_001376597:33 NM_001376603:32	603584	KIAA0358 RAB3GEP DENN

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
	NM_001376604:32 NM_001376627:33 NM_001376635:32		
<i>MAF</i>		177075	c-MAF
<i>MAFB</i>		608968	KRML
<i>MAG</i>		159460	SIGLEC4A S-MAG GMA SIGLEC-4A
<i>MAGED2</i>		300470	HCA10 11B6 MAGED MAGE-D2 JCL-1 MGC8386 BCG1
<i>MAGEL2</i>		605283	nM15 NDNL1
<i>MAGI2</i>	NM_012301:22 NM_001301128:21	606382	ARIP1 MAGI-2 KIAA0705 AIP1 ACVRIP1
<i>MAGT1</i>		300715	DKFZp564K142 IAP SLC58A1 OST3B MRX95
<i>MAK</i>		154235	RP62 dJ417M14.2
<i>MALT1</i>		604860	MLT PCASP1
<i>MAML2</i>		607537	KIAA1819 MAM3
<i>MAMLD1</i>		300120	CG1 F18 CXorf6
<i>MAN1B1</i>		604346	MANA-ER ERManI ERMan1 MRT15
<i>MAN2B1</i>		609458	MANB LAMAN
<i>MANBA</i>		609489	
<i>MAOA</i>		309850	
<i>MAOB</i>		309860	
<i>MAP2K1</i>		176872	PRKMK1 MEK1 MAPKK1
<i>MAP2K2</i>		601263	MEK2

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			PRKMK2
<i>MAP3K1</i>		600982	MEKK1 MAPKKK1 MEKK
<i>MAP3K14</i>		604655	NIK HSNIK HS FTDCR1B
<i>MAP3K6</i>		604468	ASK2 MAPKKK6 MEKK6
<i>MAP3K7</i>		602614	TAK1 MEKK7
<i>MAP3K8</i>		191195	EST ESTF Tpl-2 COT c-COT MEKK8
<i>MAP4</i>	NM_001384678:4 NM_001384679:9 NM_001384731:3 NM_001384736:3 NM_001384738:4 NM_001384744:3 NM_001384745:4,10 NM_001384748:4 NM_001384788:3 NM_001384789:3 NM_001384790:3 NM_001384791:3 NM_001384792:3 NM_001384793:3 NM_001384794:3 NM_001384795:3,5 NM_001384796:3 NM_001384797:3 NM_001384849:4 NM_001384859:4 NM_001384863:4 NM_001384872:4 NM_001384873:4 NM_001384875:4 NM_001385664:8 NM_001385675:4 NM_001385681:3 NM_001385682:9-10 NM_001385686:3 NM_001385687:3,10 NM_001385688:3,10 NM_001385689:3,10	157132	

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
	NM_001385690:4 NM_001385691:3 NM_001385692:3		
<i>MAPK1</i>		176948	ERK2 ERK PRKM1 PRKM2 p41mapk MAPK2
<i>MAPK10</i>		602897	JNK3 p493F12 p54bSAPK PRKM10
<i>MAPK8IP1</i>	NM_005456:3	604641	JIP1 IB1 PRKM8IP JIP-1
<i>MAPKAP1</i>		610558	SIN1 MGC2745 MIP1
<i>MAPKAPK3</i>		602130	MK3 3pK 3PK MK-3 MAPKAP3
<i>MAPKBP1</i>		616786	KIAA0596 NPHP20
<i>MAPRE2</i>		605789	EB1 RP1 EB2
<i>MAPT</i>	NM_001377267:9	157140	MAPTL tau-40 FLJ31424 MTBT2 FTDP-17 PPP1R103 MTBT1 PPND DDPAC TAU MSTD MGC138549 tau
<i>MARK4</i>		606495	MARKL1 KIAA1860 PAR-1D FLJ90097 Nbla00650
<i>MARS1</i>		156560	MARS SPG70 MetRS

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			CMT2U
<i>MARS2</i>		609728	mtMetRS SPAX3
<i>MARVELD2</i>		610572	DFNB49 MRVLDC2 FLJ30532 TRIC
<i>MASP1</i>		600521	MAP-1 CRARF MASP-3 MASP Map44 PRSS5
<i>MASP2</i>		605102	sMAP MASP1P1 Map19 MAP-2
<i>MAST1</i>		612256	KIAA0973 SAST
<i>MASTL</i>		608221	FLJ14813 THC2 Gwl
<i>MAT1A</i>		610550	SAMS SAMS1 MATA1 MAT
<i>MAT2A</i>		601468	SAMS2 MATII MATA2
<i>MATN3</i>		602109	HOA EDM5
<i>MATN4</i>		603897	
<i>MATR3</i>	NM_001400459:5	164015	MPD2 KIAA0723 MGC9105 VCPDM
<i>MAX</i>		154950	bHLHd5 bHLHd8 bHLHd4 bHLHd6 bHLHd7
<i>MBD1</i>	NM_001399880:1 NM_001399906:16 NM_001399916:1 NM_001399921:16 NM_001399926:15 NM_001399945:15 NM_001399952:15 NM_001399953:14 NM_001399958:14	156535	PCM1 CXXC3

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
	NM_001399975:15		
<i>MBD4</i>		603574	MED1
<i>MBD5</i>		611472	KIAA1461 FLJ11113
<i>MBD6</i>		619458	KIAA1887
<i>MBL2</i>		154545	COLEC1 MBL
<i>MBNL1</i>	NM_001314057:3 NM_001376818:3 NM_001376819:4 NM_001376837:2 NM_001387781:4 NM_001387782:3 NM_001387783:3 NM_001387784:3 NM_001387791:2 NM_001387797:3 NM_001387798:2 NM_001387799:3 NM_001387800:2 NM_001387803:2	606516	EXP40 KIAA0428 EXP42 EXP EXP35 MBNL
<i>MBOAT7</i>		606048	BB1 LENG4 hMBOA-7 LPLAT
<i>MBTPS2</i>		300294	KFSD S2P
<i>MC1R</i>		155555	MSH-R
<i>MC2R</i>		607397	ACTHR
<i>MC3R</i>		155540	MC3
<i>MC4R</i>		155541	
<i>MCC</i>		159350	
<i>MCCC1</i>		609010	MCCCα MCCA
<i>MCCC2</i>		609014	MCCCβ MCCB
<i>MCEE</i>		608419	MCE MMCE GLOD2
<i>MCF2L</i>	NM_001366645:1 NM_001366646:1	609499	KIAA0362 ARHGEF14 OST DBS
<i>MCFD2</i>		607788	LMAN1IP SDNSF F5F8D
<i>MCHR1</i>		601751	GPR24 SLC1 MCH1R
<i>MCIDAS</i>		614086	MCI

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			MCIN IDAS
<i>MCM2</i>		116945	KIAA0030 CDCL1 CCNL1 cdc19 BM28 D3S3194 DFNA70
<i>MCM3AP</i>		603294	SAC3 Map80 KIAA0572 GANP
<i>MCM4</i>		602638	hCdc21 CDC54 MGC33310 P1-Cdc21 CDC21
<i>MCM6</i>		601806	Mis5
<i>MCM7</i>		600592	CDC47 PPP1R104 MCM2
<i>MCM8</i>		608187	dJ967N21.5 MGC12866 MGC4816 MGC119523 REC MGC119522 C20orf154
<i>MCM9</i>	NM_001378361:4 NM_001378362:3 NM_001378363:4 NM_001378365:8 NM_001378367:4 NM_001378370:3 NM_001378371:6 NM_001378372:4	610098	MGC35304 dJ329L24.3 C6orf61 MCMDC1 FLJ20170
<i>MCOLN1</i>		605248	ML4 TRPM-L1 MST080 MSTP080 TRPML1 MLIV
<i>MCPH1</i>	NM_001322042:14 NM_001363979:14	607117	FLJ12847 BRIT1
<i>MCTP2</i>	NM_001385007:4 NM_001385011:4,19	616297	FLJ11175 FLJ33303
<i>MDH2</i>		154100	
<i>MDM2</i>		164785	HDM2 MGC5370

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>ME2</i>		154270	
<i>MECOM</i>		165215	PRDM3 EVI1 MDS1 MDS1-EVI1 KMT8E
<i>MECP2</i>		300005	MRX79 RTT MRX16
<i>MECR</i>	NM_001349715:2 NM_001349716:2	608205	CGI-63 ETR1 NRBF1 FASN2B
<i>MED12</i>		300188	TRAP230 OPA1 Kto FGS1 OKS ARC240 HOPA TNRC11 CAGH45 KIAA0192
<i>MED13L</i>		608771	KIAA1025 THRAP2 TRAP240L
<i>MED17</i>		603810	SRB4 DRIP80 CRSP77 TRAP80 CRSP6
<i>MED20</i>		612915	DKFZp586D2223 TRFP SRB2 PRO0213
<i>MED23</i>		605042	CRSP130 CRSP3 DRIP130 MRT18 Sur2
<i>MED25</i>	NM_001378355:18	610197	TCBAP0758 DKFZp434K0512 ACID1 ARC92
<i>MEF2A</i>	NM_001365210:8 NM_001365211:8 NM_001400070:7 NM_001400071:7	600660	RSRFC9 RSRFC4
<i>MEF2C</i>		600662	
<i>MEFV</i>		608107	FMF

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			MEF TRIM20
<i>MEGF10</i>		612453	SR-F3 KIAA1780
<i>MEGF8</i>		604267	FLJ22365 C19orf49 SBP1 EGFL4
<i>MEIS1</i>		601739	
<i>MEIS2</i>		601740	MRG1 HsT18361
<i>MEN1</i>	NM_001370251:8	613733	
<i>MEOX1</i>		600147	MOX1
<i>MEOX2</i>		600535	GAX MOX2
<i>MERTK</i>		604705	RP38 c-Eyk mer Tyro12
<i>MESP1</i>		608689	bHLHc5 MGC10676
<i>MESP2</i>		605195	SCDO2 bHLHc6
<i>MET</i>		164860	RCCP2 HGFR DFNB97
<i>METTL21A</i>	NM_001393568:4 NM_001393571:4 NM_001393572:4	615257	FAM119A HCA557b HSPA-KMT LOC151194
<i>METTL23</i>		615262	C17orf95 LOC124512
<i>METTL8</i>	NM_001321157:2-11 NM_001321154.2:all NM_001321155.2:all NM_001321156.2:all NM_001321158:2-9 NM_001321159.2:all NM_001321160.2:all NM_001321161:2-7 NM_001321162.2:all NM_024770.4:all	609525	FLJ13984 TIP
<i>MFAP5</i>		601103	MP25 MAGP2
<i>MFF</i>		614785	C2orf33 GL004
<i>MFGE8</i>		602281	SED1 OAcGD3S BA46 MFG-E8

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			hP47 HsT19888 SPAG10 EDIL1
<i>MFN2</i>		608507	CPRP1 MARF CMT2A2 KIAA0214
<i>MFRP</i>		606227	FLJ30570 NNO2 rd6 C1QTNF5
<i>MFSD2A</i>		614397	FLJ14490 MFSD2 SLC59A1
<i>MFSD8</i>		611124	CLN7 MGC33302
<i>MGAM</i>	NM_004668:35 NM_001365693:35,39-61	154360	MGA
<i>MGAT2</i>		602616	GNT-II
<i>MGLL</i>	NM_001388312:6 NM_001388313:6 NM_001388315:4,7 NM_001388317:4 NM_001388318:4	609699	MAGL MGL HU-K5
<i>MGME1</i>		615076	DDK1 bA504H3.4 C20orf72
<i>MGMT</i>		156569	
<i>MGP</i>		154870	
<i>MGST2</i>		601733	MGST-II
<i>MIA</i>		601340	CD-RAP
<i>MIB1</i>		608677	KIAA1323 DIP-1 ZZANK2 MIB ZZZ6
<i>MICA</i>		600169	PERB11.1
<i>MICOS13</i>		616658	MIC13 QIL1 MIC12 P117 C19orf70
<i>MICU1</i>	NM_001363513:6	605084	FLJ12684 EFHA3 CALC CBARA1
<i>MID1</i>		300552	OS TRIM18 RNF59

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			FXY
<i>MID2</i>		300204	MRX101 RNF60 FXY2 TRIM1
<i>MINPP1</i>		605391	MIPP
<i>MIP</i>		154050	LIM1 AQP0 MP26
<i>MIPEP</i>		602241	MIP
<i>MITF</i>	NM_001354607:2	156845	WS2 WS2A bHLHe32 MI
<i>MKKS</i>	NM_001394148.1:all NM_001394149.1:all	604896	BBS6
<i>MKRN3</i>		603856	MGC88288 ZFP127 D15S9 ZNF127 RNF63
<i>MKS1</i>		609883	FLJ20345 MKS POC12 BBS13
<i>MLC1</i>		605908	VL LVM MLC KIAA0027
<i>MLH1</i>		120436	MLH-1 HNPCC FCC2 HNPCC2 COCA2
<i>MLH3</i>		604395	
<i>MLLT10</i>	NM_001195627:4	602409	AF10
<i>MLPH</i>		606526	I(1)-3Rk I1Rk3 exophilin-3 Slac-2a In
<i>MLST8</i>		612190	GBL Lst8 Pop3 GbetaL
<i>MLYCD</i>		606761	MCD hMCD
<i>MMAA</i>		607481	cbIA
<i>MMAB</i>		607568	cbIB CFAP23

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
MMACHC		609831	DKFZP564I122 cbIC
MMADHC		611935	CL25022 C2orf25 cbID
MME	<i>NM_001354644.4</i>	120520	CD10 CALLA NEP
MMEL1		618104	MMEL2 NL2 NEPII NL1 SEP
MMGT1			TMEM32 EMC5
MMP1		120353	CLG
MMP13		600108	CLG3
MMP14		600754	MT1-MMP
MMP19		601807	RASI-1 MMP18
MMP2		120360	TBE-1 CLG4A CLG4
MMP20		604629	
MMP21		608416	
MMP23B	NM_006983:2-8	603321	MIFR MIFR-1 MMP22
MMP25		608482	MT6-MMP MMP20 MMPL1
MMP9		120361	CLG4B
MMS22L		615614	C6orf167 dJ39B17.2
MMUT		609058	MCM MUT
<i>MN1</i>		156100	MGCR MGCR1 MGCR1-PEN
<i>MNX1</i>	NM_005515:1	142994	SCRA1 HLXB9 HOXHB9 HB9
<i>MOB4</i>		609361	PREI3 MOBKL3 MOB3 2C4D DKFZP564M112 PHOCN CGI-95

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>MOBP</i>		600948	
<i>MOCOS</i>		613274	FLJ20733 HMCS MOS
<i>MOCS1</i>	NM_001358529:10 NM_001358530:11 NM_001358531:10	603707	MOCOD
<i>MOCS2</i>		603708	MOCO1 MOCS2B MOCS2A
<i>MOG</i>		159465	BTNL11 BTN6
<i>MOGS</i>		601336	GCS1 CWH41 DER7
<i>MORC2</i>		616661	ZCWCC1 AC004542.C22.1 ZCW3 KIAA0852
<i>MOS</i>		190060	
<i>MOV10</i>		610742	MGC2948 gb110 fSAP113
<i>MPC1</i>		614738	CGI-129 BRP44L dJ68L15.3 SLC54A1
<i>MPDU1</i>		604041	SL15 CDGlf PQLC5 SLC66A5 Lec35
<i>MPDZ</i>	NM_001375413:32	603785	MUPP1
<i>MPI</i>		154550	
<i>MPL</i>		159530	THPOR CD110 TPOR
<i>MPLKIP</i>		609188	ORF20 TTDN1 C7orf11
<i>MPO</i>		606989	
<i>MPP2</i>		600723	DLG2 DKFZp761D0712
<i>MPP3</i>		601114	DLG3
<i>MPV17</i>		137960	SYM1
<i>MPZ</i>		159440	HMSNIB CMT1 CMT2J P0 CMT2I

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			CMT1B
<i>MR1</i>		600764	HLALS
<i>MRAP</i>		609196	C21orf61 FALP B27
<i>MRAP2</i>		615410	bA51G5.2 C6orf117
<i>MRAS</i>		608435	R-RAS3 M-RAs RRAS3
<i>MRE11</i>		600814	ATLD MRE11A
<i>MRI1</i>		615105	MRDI Ypr118w MGC3207 mtnA
<i>MRPL10</i>		611825	MRP-L8 MGC17973 RPML8 MRPL8 L10MT MRP-L10
<i>MRPL12</i>		602375	MRPL7 MRPL7/L12 RPML12
<i>MRPL3</i>		607118	MRL3 RPML3
<i>MRPL33</i>		610059	RPL33L C2orf1
<i>MRPL44</i>		611849	FLJ13990 FLJ12701
<i>MRPS16</i>		609204	CGI-132
<i>MRPS22</i>	NM_001363857:1	605810	C3orf5 GIBT GK002 MRP-S22
<i>MRPS23</i>		611985	CGI-138 HSPC329 MRP-S23
<i>MRPS7</i>		611974	MRP-S RPMS7 RP-S7
<i>MRTFA</i>	NM_020831:3 NM_001282661:3 NM_001282662:3	606078	MAL BSAC MKL KIAA1438 MKL1 MRTF-A
<i>MS4A1</i>		112210	Bp35 CD20

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			B1 FMC7
<i>MS4A2</i>		147138	IGER APY FCER1B
<i>MS4A6A</i>		606548	CD20L3 MS4A6
<i>MS4A6E</i>		608402	
<i>MS4A7</i>		606502	CD20L4 CFFM4 MS4A8
<i>MSH2</i>		609309	HNPCC1 COCA1 HNPCC MSH-2
<i>MSH3</i>		600887	DUP MRP1
<i>MSH4</i>		602105	
<i>MSH5</i>		603382	G7
<i>MSH6</i>		600678	GTBP MSH-6
<i>MSM01</i>		607545	DESP4 ERG25 SC4MOL
<i>MSN</i>		309845	
<i>MSR1</i>	NM_001363744:1	153622	SCARA1 SR-AIII CD204 SR-AII SR-A SR-AI
<i>MSRB3</i>		613719	DFNB74 FLJ36866 DKFZp686C1178
<i>MST1R</i>		600168	CDw136 SEA RON CD136 PTK8
<i>MSTN</i>		601788	GDF8
<i>MSTO1</i>	NM_018116:1-3,6-7,13-14 NM_001256532:1-3,6-7,13-14 NM_001256533:1-3,6-7,13-14 NM_001350772:1-3,6-7,13-14 NM_001350773:1-3,6-7,13-14 NM_001350774:1-3,6-7,13-14 NM_001350775:1-3,6-7,13-14 NM_001350776:3,6-7,13-14 NM_001350777:6-7,13-14 NM_001350778:6-7,13-14	617619	misato MST FLJ10504 LST005

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
	NM_001350779:6-7,13-14 NM_001350780:6-7,13-14 NM_001350781:6-7,13-14 NM_001350782:6-7,13-14 NM_001350783:6-7,13-14 NM_001350784:7,13-14 NM_001350785:7,13-14 NM_001350786:6-7,13-14 NM_001350787:7,13-14 NM_001350788:6-7,13-14 NM_001350789:7,13-14		
<i>MSX1</i>		142983	OFC5 HOX7 HYD1
<i>MSX2</i>		123101	PFM FPP CRS2 MSH HOX8 PFM1
<i>MTAP</i>	NM_001396040:1 NM_001396041:8 NM_001396042:7 NM_001396043:8 NM_001396044:8-10 NM_001396045:7-9	156540	MSAP c86fus
<i>MTCP1</i>		300116	TCL1C P13MTCP1 p8MTCP1
<i>MTFMT</i>		611766	FMT1
<i>MTHFD1</i>	NM_001364837:27	172460	MTHFC MTHFD
<i>MTHFD1L</i>	NM_001350490:2	611427	FLJ21145 DKFZP586G1517 FTHFSDC1
<i>MTHFD2</i>		604887	
<i>MTHFD2L</i>	NM_001351310:9 NM_001351311:8 NM_001351314:5 NM_001351329:2 NM_001351331:2-3	614047	MGC72244
<i>MTHFR</i>		607093	
<i>MTHFS</i>		604197	HsT19268
<i>MTM1</i>		300415	
<i>MTMR1</i>	NM_001353990:3	300171	
<i>MTMR14</i>	NM_001400518:2 NM_001400521:2 NM_001400526:2	611089	FLJ90311 hJumpy FLJ22405 hEDTP C3orf29

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>MTMR2</i>		603557	CMT4B KIAA1073
<i>MTNR1A</i>		600665	MEL-1A-R
<i>MTNR1B</i>		600804	
<i>MT01</i>		614667	
<i>MTOR</i>		601231	FLJ44809 RAPT1 FRAP2 FRAP1 FRAP RAFT1
<i>MTPAP</i>		613669	FLJ10486 TENT6 PAPD1 SPAX4
<i>MTR</i>		156570	cblG
<i>MTRFR</i>		613541	COXPD7 mtRF-R SPG55 FLJ38663 C12orf65
<i>MTRR</i>		602568	cblE
<i>MTSS2</i>		616951	LOC92154 ABBA MTSS1L ABBA-1
<i>MTTP</i>		157147	MTP ABL
<i>MUC1</i>	NM_001204285:3 NM_001204286:3	158340	PUM CD227 ADMCKD1 MCD PEM Ca15-3 EMA MCKD MCKD1 ADMCKD KL-6
<i>MUC5B</i>	NM_002458:31	600770	MG1 MUC5
<i>MUSK</i>		601296	
<i>MUTYH</i>		604933	MYH
<i>MVD</i>		603236	MPD
<i>MVK</i>		251170	MK LRBP
<i>MXI1</i>		600020	MXD2 MXI MAD2 bHLHc11

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>MXRA8</i>		617293	DKFZp586E2023
<i>MYB</i>		189990	c-myb
<i>MYBPC1</i>		160794	ssMyBP-C
<i>MYBPC3</i>		600958	FHC CMH4 cMyBP-C
<i>MYC</i>		190080	bHLHe39 MYCC c-Myc
<i>MYCBP2</i>		610392	KIAA0916 PHR1 FLJ10106 PAM
<i>MYCN</i>		164840	MYCNOT bHLHe37 N-myc NMYC
<i>MYD88</i>		602170	
<i>MYF6</i>		159991	MRF4 bHLHc4
<i>MYH10</i>		160776	NMMHCB
<i>MYH11</i>		160745	SMHC SMMHC SMMS-1
<i>MYH13</i>	NM_003802:5	603487	MyHC-eo
<i>MYH14</i>		608568	MYH17 MHC16 DFNA4 FLJ13881 KIAA2034
<i>MYH15</i>		609929	KIAA1000
<i>MYH2</i>	NM_017534:23 NM_001100112:23	160740	MYHSA2 MyHC-2A IBM3 MYHas8 MYH2A MyHC-IIa
<i>MYH3</i>		160720	HEMHC SMHCE MYHSE1 MYHC-EMB
<i>MYH6</i>	NM_002471:26	160710	
<i>MYH7</i>	NM_000257:27	160760	CMH1 MPD1 CMD1S
<i>MYH7B</i>		609928	MYH14 KIAA1512 dJ756N5.1 MHC14
<i>MYH8</i>	NM_002472:5	160741	MyHC-pn

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			MyHC-peri
<i>MYH9</i>		160775	NMHC-II-A EPSTS FTNS DFNA17 MHA NMMHCA
<i>MYL2</i>		160781	CMH10
<i>MYL3</i>		160790	CMH8 MLC1V MLC1SB VLC1
<i>MYL4</i>		160770	AMLC GT1 PRO1957 ALC1
<i>MYL9</i>		609905	MRLC1 MLC2 LC20 MYRL2
<i>MYLIP</i>		610082	MIR IDOL
<i>MYLK</i>		600922	MLCK108 MYLK1 MLCK210 smMLCK MLCK KRP Telokin MLCK1 MYLK-L
<i>MYLK2</i>		606566	KMLC skMLCK MLCK2
<i>MYO15A</i>		602666	MYO15 DFNB3
<i>MYO18B</i>		607295	BK125H2.1
<i>MYO1A</i>		601478	DFNA48 BBMI MYHL
<i>MYO1C</i>	NM_001363855:1	606538	Myo1C NMI myr2
<i>MYO1E</i>		601479	MYO1C HuncM-IC MGC104638
<i>MYO1F</i>		601480	
<i>MYO3A</i>		606808	DFNB30
<i>MYO5A</i>	NM_001382347:33 NM_001382348:2,34	160777	MYH12 GS1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
	NM_001382349:2		MYO5 MYR12
<i>MYO5B</i>		606540	KIAA1119
<i>MYO6</i>	NM_001368137:29 NM_001368865:29 NM_001368866:29	600970	KIAA0389 DFNA22 DFNB37
<i>MYO7A</i>		276903	DFNB2 USH1B DFNA11 NSRD2
<i>MYO9A</i>		604875	FLJ11061 FLJ13244 MGC71859
<i>MYOC</i>		601652	JOAG1 GLC1A TIGR
<i>MYOCD</i>		606127	MYCD
<i>MYOD1</i>		159970	MYF3 bHLHc1 PUM MYOD
<i>MYOM1</i>		603508	
<i>MYOM2</i>		603509	
<i>MYOT</i>		604103	TTID LGMD1 LGMD1A
<i>MYOZ2</i>		605602	C4orf5 CS-1 FATZ-2
<i>MYPN</i>		608517	MYOP
<i>MYT1</i>		600379	MYT1 NZF2 PLPB1 ZC2HC4A ZC2H2C1 MTF1
<i>MYT1L</i>		613084	KIAA1106 NZF1 ZC2H2C2 ZC2HC4B
<i>NAA10</i>		300013	DXS707 TE2 ARD1 ARD1A
<i>NAA15</i>		608000	FLJ13340 NARG1 TBDN100 NATH
<i>NADK2</i>		615787	C5orf33 FLJ30596

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			MNADK NADKD1
<i>NAF1</i>		617868	
<i>NAGA</i>		104170	D22S674
<i>NAGLU</i>		609701	NAG
<i>NAGPA</i>		607985	APAA UCE
<i>NAGS</i>		608300	ARGA AGAS NAT7
<i>NALCN</i>	NM_001350748:19	611549	bA430M15.1 Canlon VGCNL1
<i>NAMPT</i>	NM_005746:11	608764	PBEF1 PBEF
<i>NANOS1</i>		608226	NOS1 ZC2HC12A
<i>NANOS3</i>		608229	ZC2HC12C NOS3 NANOS1L
<i>NANS</i>		605202	SAS
<i>NARS2</i>		612803	DFNB94 FLJ23441 SLM5
<i>NAT10</i>		609221	hALP FLJ10774 NET43 Kre33 FLJ12179 KIAA1709
<i>NAT2</i>		612182	AAC2
<i>NAT8</i>		606716	ATase2 GLA Hcml1 TSC501
<i>NAT8L</i>		610647	Shati FLJ37478 Hcml3
<i>NAXE</i>		608862	MGC119145 MGC119143 APOA1BP MGC119144 YJEFN1 AIBP
<i>NBAS</i>		608025	NAG
<i>NBEAL2</i>	NM_001365116:1	614169	KIAA0540
<i>NBN</i>		602667	AT-V1 NBS AT-V2 NBS1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			ATV
<i>NCAPD2</i>		615638	CAP-D2 hCAP-D2 KIAA0159 CNAP1
<i>NCAPD3</i>	NM_001372065:34	609276	KIAA0056 FLJ42888 hcp-6 hCAP-D3 hHCP-6 CAP-D3
<i>NCAPH</i>		602332	CAP-H BRRN1 hCAP-H
<i>NCF2</i>		608515	p67phox NOXA2
<i>NCF4</i>		601488	p40phox SH3PXD4
<i>NCOA6</i>		605299	NRC ASC2 PRIP RAP250 AIB3 KIAA0181 TRBP
<i>NCS1</i>		603315	NCS-1 FREQ
<i>NCSTN</i>		605254	KIAA0253 APH2
<i>NDE1</i>		609449	NDE FLJ20101 nude
<i>NDN</i>		602117	HsT16328 PWCR
<i>NDP</i>		300658	norrin EVR2
<i>NDRG1</i>		605262	RTP TDD5 CAP43 DRG1 NDR1
<i>NDRG4</i>	NM_001378337:1 NM_001378341:1 NM_001378343:1	614463	SMAP-8 KIAA1180
<i>NDST1</i>		600853	NST1 HSST
<i>NDUFA1</i>		300078	MWFE CI-MWFE
<i>NDUFA10</i>		603835	CI-42k
<i>NDUFA11</i>		612638	B14.7

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>NDUFA12</i>		614530	DAP13 B17.2
<i>NDUFA13</i>		609435	GRIM-19 GRIM19 CDA016 CGI-39 B16.6
<i>NDUFA2</i>		602137	B8
<i>NDUFA4</i>		603833	MISTR1 MRCAF1 MLRQ CI-9k COXFA4
<i>NDUFA7</i>		602139	B14.5a
<i>NDUFA8</i>		603359	PGIV MGC793
<i>NDUFA9</i>		603834	NDUFS2L COQ11 SDR22E1 CI-39k
<i>NDUFAF1</i>		606934	CIA30 CGI-65
<i>NDUFAF2</i>		609653	mimitin NDUFA12L B17.2L MMTN
<i>NDUFAF3</i>		612911	MGC10527 C3orf60 E3-3 DKFZP564J0123 2P1
<i>NDUFAF4</i>		611776	bA22L21.1 HSPC125 C6orf66 HRPAP20 My013
<i>NDUFAF5</i>	NM_001352408:8	612360	C20orf7 dJ842G6.1
<i>NDUFAF6</i>	NM_001354516:3 NM_001354534:9	612392	C8orf38 MGC40214
<i>NDUFAF7</i>		615898	C2orf56 PRO1853 MidA
<i>NDUFB11</i>		300403	NP17.3 ESSS Np15
<i>NDUFB3</i>		603839	B12
<i>NDUFB8</i>		602140	CI-ASHI ASHI
<i>NDUFB9</i>		601445	UQOR22

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			B22
			LYRM3
<i>NDUFS1</i>		157655	CI-75k
<i>NDUFS2</i>		602985	CI-49
<i>NDUFS3</i>		603846	CI-30
<i>NDUFS4</i>		602694	CI-18
			AQDQ
<i>NDUFS6</i>		603848	CI-13kA
<i>NDUFS7</i>	NM_001363602:8	601825	PSST
			CI-20
			FLJ45860
			FLJ46880
<i>NDUFS8</i>		602141	CI-23k
			TYKY
<i>NDUFV1</i>		161015	CI-51K
<i>NDUFV2</i>		600532	CI-24k
<i>NDUFV3</i>		602184	CI-10k
<i>NEB</i>	NM_001271208:82-105 NM_001164507:82-105 NM_001164508:82-105	161650	NEB177D
			NEM2
<i>NEBL</i>	NM_001377323:1 NM_001377324:1 NM_001377325:1	605491	C10orf113
			LNEBL
			bA16503.1
			LASP2
<i>NECAP1</i>		611623	DKFZP566B183
<i>NECTIN1</i>		600644	HlgR
			HVEC
			PVRL1
			OFC7
			SK-12
			CLPED1
			PRR1
			PRR
			ED4
			CD111
			PVRR1
<i>NECTIN4</i>		609607	LNIR
			PVRL4
			nectin-4
			PRR4
<i>NEDD4</i>		602278	MGC176705
			NEDD4-1
			KIAA0093
			RPF1
<i>NEDD4L</i>		606384	RSP5
			NEDD4-2
			KIAA0439
<i>NEDD9</i>		602265	CAS-L
			CASS2
			HEF1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>NEFH</i>		162230	NFH NF-H
<i>NEFL</i>		162280	NF68 NFL PPP1R110 CMT2E CMT1F
<i>NEFM</i>		162250	NFM NF-M NEF3
<i>NEIL1</i>	NM_001352519:3	608844	FPG1 NEI1 FLJ22402 hFPG1
<i>NEIL2</i>		608933	MGC4505 FLJ31644 NEH2 MGC2832
<i>NEK1</i>	NM_001374422:17 NM_001374423:16	604588	KIAA1901 NY-REN-55
<i>NEK11</i>	NM_001321221:5 NM_001353022:5 NM_001353026:4 NM_001353033:6 NM_001353034:5	609779	FLJ23495
<i>NEK2</i>	NM_001204182:8	604043	PPP1R111 NLK1 RP67 NEK2A
<i>NEK8</i>		609799	NPHP9
<i>NEK9</i>		609798	DKFZp434D0935 Nek8 NERCC1 NERCC MGC16714
<i>NELL1</i>		602319	FLJ45906 IDH3GL
<i>NEU1</i>		608272	NEU
<i>NEUROD1</i>		601724	NEUROD bHLHa3 NeuroD BHF-1 BETA2 MODY6
<i>NEUROG3</i>		604882	Math4B Atoh5 bHLHa7 ngn3
<i>NEXMIF</i>		300524	KIDLIA MRX98

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			XPN KIAA2022
<i>NEXN</i>		613121	NELIN nexilin
<i>NF1</i>		613113	
<i>NF2</i>		607379	merlin-1 merlin ACN BANF SCH
<i>NFAT5</i>		604708	NFATZ NF-AT5 KIAA0827 TONEBP NFATL1 OREBP
<i>NFATC1</i>		600489	NFATc NF-ATC NFAT2
<i>NFIA</i>		600727	KIAA1439 NFI-L
<i>NFIX</i>	NM_001365902:1 NM_001365982:1 NM_002501:1	164005	NF1A
<i>NFKB1</i>		164011	NFkappaB NF-kappaB KBF1 p50 NF-kB1 p105 NFKB-p50
<i>NFKB2</i>		164012	p52 p49/p100 LYT-10 NF-kB2 p105
<i>NFKBIA</i>		164008	NFKBI MAD-3 IKBA IkappaBalpha
<i>NFS1</i>		603485	IscS NifS
<i>NFU1</i>		608100	NIFUC CGI-33 NifU HIRIP5
<i>NFXL1</i>			HOZFP
<i>NGF</i>		162030	NGFB
<i>NGFR</i>		162010	p75NTR TNFRSF16

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			CD271
<i>NGLY1</i>		610661	FLJ11005 PNG-1 PNG1
<i>NHEJ1</i>		611290	XLF FLJ12610 Cernunnos
<i>NHLRC1</i>		608072	bA204B7.2 EPM2B
<i>NHP2</i>	NM_001396110:4	606470	NOLA2 FLJ20479
<i>NHS</i>		300457	
<i>NID1</i>		131390	entactin NID
<i>NIN</i>		608684	
<i>NIPA1</i>		608145	SPG6 SLC57A1 MGC35570
<i>NIPA2</i>		608146	SLC57A2
<i>NIPAL4</i>		609383	SLC57A6 ICHYN
<i>NIPBL</i>		608667	IDN3 FLJ12597 DKFZp434L1319 Scc2 FLJ13354 FLJ11203 FLJ13648
<i>NIPSNAP3A</i>		608871	FLJ13953 DKFZp564D177 MGC14553 HSPC299
<i>NKX2-1</i>		600635	TTF1 TITF1 NKX2A TTF-1 BCH
<i>NKX2-2</i>		604612	NKX2B NKX2.2
<i>NKX2-5</i>		600584	NKX4-1 CSX1 NKX2E NKX2.5 CSX
<i>NKX2-6</i>		611770	NKX4-2 CSX2
<i>NKX3-2</i>		602183	NKX3B NKX3.2 BAPX1
<i>NLGN1</i>	NM_001365923:3	600568	KIAA1070

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
	NM_001365924:3 NM_001365925:3 NM_001365926:3 NM_001365927:3 NM_001365928:3		
<i>NLGN2</i>		606479	KIAA1366
<i>NLGN3</i>		300336	KIAA1480 HNL3 ASPGX1 AUTSX1
<i>NLGN4X</i>	NM_020742:5 NM_001282145:6 NM_001282146:5 NM_181332:5	300427	NLGN KIAA1260 HLNX NLGN4
<i>NLRC4</i>	NM_021209:2 NM_001199138:2 NM_001199139:2 NM_001302504:2	606831	CLR2.1 CLANB CARD12 CLANA CLAN CLANC CLAND CLAN1 ipaf
<i>NLRP1</i>		606636	NAC DEFCAP NALP1 DKFZp586O1822 CARD7 SLEV1 KIAA0926 CLR17.1 VAMAS1
<i>NLRP12</i>		609648	RNO2 PAN6 CLR19.3 NALP12 PYPAF7 Monarch1
<i>NLRP14</i>		609665	NOD5 NALP14 PAN8 CLR11.2 Nalp-iota GC-LRR
<i>NLRP2</i>		609364	CLR19.9 FLJ20510 PAN1 PYPAF2 NBS1 NALP2
<i>NLRP3</i>		606416	CIAS1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			AVP DFNA34 PYPAF1 FCU NALP3 C1orf7 AII MWS AGTAVPRL FCAS CLR1.1
<i>NLRP5</i>		609658	NALP5 MATER PAN11 PYPAF8 CLR19.8
<i>NLRP7</i>		609661	PAN7 NOD12 NALP7 CLR19.4 PYPAF3
<i>NME1</i>		156490	NM23-H1 NM23 NDPKA
<i>NME1-NME2</i>	NM_001018136:5-8		NMELV NM23-LV
<i>NME7</i>		613465	FLJ37194 NM23-H7 CFAP67
<i>NME8</i>		607421	CILD6 SPTRX2 DNAI8 TXNDC3 NM23-H8
<i>NMNAT1</i>		608700	PNAT1 LCA9 NMNAT
<i>NNT</i>		607878	
<i>NOBOX</i>		610934	Og2x OG2
<i>NOD1</i>		605980	CLR7.1 CARD4 NLRC1
<i>NOD2</i>		605956	NLRC2 CLR16.3 BLAU IBD1 CARD15 CD PSORAS1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>NODAL</i>		601265	
<i>NOG</i>		602991	SYNS1 SYM1
<i>NOL3</i>		605235	ARC CARD2 NOP30 MYP
<i>NONO</i>		300084	NRB54 NMT55 P54 PPP1R114 P54NRB
<i>NOP10</i>		606471	NOLA3 NOP10P MGC70651
<i>NOP56</i>		614154	SCA36 NOL5A
<i>NOS1</i>		163731	NOS nNOS
<i>NOS1AP</i>		605551	CAPON KIAA0464
<i>NOS2</i>		163730	HEP-NOS NOS iNOS NOS2A
<i>NOS3</i>		163729	eNOS ECNOS
<i>NOTCH1</i>		190198	TAN1
<i>NOTCH2</i>	NM_024408:1-4 NM_001200001:1-4	600275	
<i>NOTCH3</i>	NM_000435:1	600276	CASIL CADASIL
<i>NOX1</i>		300225	NOH-1 MOX1 NOH1 NOH-1L GP91-2
<i>NPAS2</i>		603347	MOP4 bHLHe9 PASD4
<i>NPAT</i>		601448	E14 p220
<i>NPC1</i>		607623	SLC65A1
<i>NPC1L1</i>		608010	SLC65A2
<i>NPC2</i>		601015	HE1 EDDM1 NP-C2
<i>NPEPPS</i>	NM_006310:1-12 NM_001330257:1-13	606793	MP100 PSA
<i>NPHP1</i>	NM_001374257:20	607100	SLSN1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			NPH1 JBTS4
<i>NPHP3</i>		608002	MKS7 FLJ30691 SLSN3 CFAP31 NPH3 FLJ36696 KIAA2000
<i>NPHP4</i>		607215	KIAA0673 SLSN4 POC10
<i>NPHS1</i>		602716	CNF NPHN
<i>NPHS2</i>		604766	PDCN SRN1
<i>NPM1</i>		164040	B23 NPM
<i>NPPA</i>		108780	ANP PND
<i>NPR2</i>		108961	GC-B ANPb AMDM NPRB GUCY2B ANPRB
<i>NPRL2</i>		607072	NPR2L NPR2 TUSC4
<i>NPRL3</i>		600928	CGTHBA NPR3 HS-40 RMD11 MARE C16orf35
<i>NQO1</i>		125860	DTD DIA4 NMOR1 QR1 DHQU
<i>NR0B1</i>		300473	AHC DSS AHCH DAX1
<i>NR0B2</i>		604630	SHP
<i>NR1D1</i>	NM_021724:1-7	602408	THRAL THRA1 ear-1 Rev-ErbAalpha hRev

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			REVERBalpha REVERBA
<i>NR1D2</i>		602304	REVERBbeta Hs.37288 EAR-1r BD73 RVR HZF2 REVERBB
<i>NR1H3</i>		602423	LXR-a RLD-1 LXRa
<i>NR1H4</i>		603826	HRR1 HRR-1 FXR RIP14
<i>NR1I2</i>		603065	PXR ONR1 PAR2 SXR BXR
<i>NR1I3</i>		603881	CAR MB67 CAR1
<i>NR2E1</i>		603849	TLX TLL XTLL
<i>NR2E3</i>		604485	rd7 RP37 PNR
<i>NR2F1</i>		132890	ERBAL3 TFCOUP1 COUPTF1 SVP44 COUP-TFI TCFCOUP1 EAR-3
<i>NR2F2</i>		107773	NF-E3 TFCOUP2 COUPTF2 SVP40 COUP-TFII COUPTFB ARP1
<i>NR3C1</i>		138040	GRL GR
<i>NR3C2</i>		600983	MLR MR
<i>NR4A2</i>		601828	RNR1 NURR1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			TINUR HZF-3 NOT
<i>NR4A3</i>		600542	CSMF MINOR NOR1 CHN
<i>NR5A1</i>		184757	SF-1 AD4BP SF1 hSF-1 FTZ1 FTZF1 ELP
<i>NRAS</i>		164790	N-ras
<i>NRG1</i>		142445	HGL NRG1-IT2 NDF GGF HRG
<i>NRGN</i>		602350	RC3
<i>NRL</i>		162080	NRL-MAF RP27 D14S46E
<i>NRP1</i>		602069	CD304 NRP VEGF165R
<i>NRTN</i>		602018	NTN
<i>NRXN1</i>		600565	Hs.22998 KIAA0578
<i>NRXN2</i>		600566	
<i>NRXN3</i>	NM_001366426:5	600567	KIAA0743 C14orf60
<i>NSD1</i>		606681	KMT3B ARA267 STO FLJ22263
<i>NSD2</i>		602952	WHSC1 MMSET KMT3G
<i>NSD3</i>		607083	WHSC1L1 FLJ20353 KMT3F WHISTLE
<i>NSDHL</i>		300275	SDR31E1 XAP104 H105e3
<i>NSMCE2</i>		617246	C8orf36 MMS21 ZMIZ7

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			NSE2 FLJ32440
<i>NSMCE3</i>		608243	NDNL2 MAGEG1 MAGEL3 NSE3 HCA4
<i>NSMF</i>		608137	NELF
<i>NSUN2</i>		610916	TRM4 SAKI FLJ20303 MRT5 Misu
<i>NSUN3</i>		617491	FLJ22609
<i>NSUN7</i>		617185	FLJ14001
<i>NT5C2</i>	NM_001351170:6 NM_001351171:7 NM_001351172:7 NM_001351173:6 NM_001351174:1 NM_001351175:5	600417	GMP SPG45 NT5B SPG65 PNT5 cN-II
<i>NT5C3A</i>		606224	PSN1 UMPH cN-III NT5C3 PN-I UMPH1 POMP P5'N-1 hUMP1 p36
<i>NT5DC4</i>	NM_001393655:1-16 NM_001350494.2:all		
<i>NT5E</i>		129190	CD73 eNT eN NT5 CALJA
<i>NTF4</i>		162662	NTF5 NT-4/5 GLC10
<i>NTHL1</i>		602656	NTH1 OCTS3
<i>NTNG1</i>		608818	KIAA0976 Lmnt1
<i>NTRK1</i>		191315	MTC TRK TRKA
<i>NTRK2</i>	NM_001369547:13	600456	TRKB
<i>NTRK3</i>		191316	TRKC

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>NUB1</i>		607981	NUB1L NYREN18 BS4
<i>NUBPL</i>		613621	FLJ12660 IND1 huInd1 C14orf127
<i>NUDC</i>		610325	
<i>NUDT15</i>		615792	MTH2 FLJ10956
<i>NUMA1</i>		164009	NUMA
<i>NUP107</i>		607617	NUP84
<i>NUP155</i>		606694	N155 KIAA0791
<i>NUP205</i>		614352	C7orf14 KIAA0225
<i>NUP214</i>		114350	D9S46E CAIN CAN N214
<i>NUP62</i>		605815	IBSN MGC841 FLJ43869 p62 SNDI FLJ20822 DKFZp547L134
<i>NUP93</i>		614351	KIAA0095
<i>NUS1</i>	NM_138459:1,5	610463	NgBR MGC7199 TANGO14 C6orf68
<i>NXF5</i>	NM_032946:7,10-13	300319	
<i>NXNL1</i>		608791	TXNL6 RDCVF
<i>NXPH2</i>		604635	NPH2
<i>NXPH3</i>		604636	NPH3
<i>NYX</i>		300278	CSNB1A CSNB4 CLRP CSNB1
<i>OARD1</i>		614393	MGC19570 TARG1 dJ34B21.3 C6orf130
<i>OAT</i>		613349	HOGA
<i>OBSCN</i>		608616	UNC89 KIAA1556 KIAA1639 ARHGEF30

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>OBSL1</i>		610991	KIAA0657
<i>OCA2</i>		611409	BEY1 EYCL2 BEY BEY2 P D15S12 EYCL3 EYCL
<i>OCLN</i>	NM_002538:5-9 NM_001205254:5-9 NM_001205255:3-7	602876	PPP1R115
<i>OCRL</i>		300535	Dent-2 OCRL1
<i>ODAD1</i>	NM_001364171:3	615038	FLJ32926 CCDC114 CILD20
<i>ODAD2</i>	NM_018076:9 NM_001290020:9 NM_001290021:13 NM_001312689:4	615408	gudu ARMC4 FLJ10376 FLJ10817 DKFZP434P1735 CILD23
<i>ODAD3</i>		615956	MGC20983 ODA10 CCDC151
<i>ODAD4</i>		617095	DKFZP434H0115 TTC25
<i>ODAPH</i>		614829	FLJ23657 AI2A4 C4orf26
<i>ODC1</i>		165640	ODC
<i>OFD1</i>		300170	71-7A RP23 JBTS10 CXorf5
<i>OGDHL</i>		617513	FLJ10851
<i>OGG1</i>		601982	HOGG1 HMMH OGH1 MUTM
<i>OGT</i>		300255	FLJ23071 HRNT1 OGT1 O-GLCNAC MGC22921
<i>OLFM2</i>		617492	NOE2 OlfC
<i>OLR1</i>		602601	CLEC8A SCARE1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			LOX-1
<i>OMG</i>		164345	OMGP
<i>OPA1</i>		605290	NPG NTG MGM1 FLJ12460 KIAA0567
<i>OPA3</i>		606580	FLJ22187 MGA3
<i>OPCML</i>		600632	OBCAM IGLON1 OPCM
<i>OPHN1</i>		300127	MRX60 OPN1 ARHGAP41
<i>OPLAH</i>		614243	5-Opase OPLA
<i>OPN1LW</i>	NM_020061:1,4-6	300822	CBBM COD5 RCP CBP
<i>OPN1SW</i>		613522	BCP BOP CBT
<i>OPRD1</i>		165195	
<i>OPRK1</i>		165196	OPRK KOR
<i>OPRM1</i>		600018	MOR1
<i>OPTC</i>		605127	
<i>OPTN</i>		602432	TFIIIA-INTP HIP7 GLC1E FIP-2 NRP FIP2 HYPL
<i>OR2W3</i>		616729	OR2W3P OST718 OR2W8P
<i>ORAI1</i>		610277	TMEM142A FLJ14466 CRACM1
<i>ORC1</i>		601902	HSORC1 PARC1 ORC1L
<i>ORC4</i>		603056	ORC4L HsORC4 Orc4p
<i>ORC6</i>		607213	ORC6L
<i>OSBPL2</i>		606731	ORP-2

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			DFNA67 KIAA0772
<i>OSMR</i>		601743	OSMRB OSMRbeta
<i>OSTM1</i>		607649	HSPC019 GL
<i>OTC</i>		300461	OTCase OTCD
<i>OTOA</i>	NM_144672:21-29 NM_001161683:16-24 NM_170664:11-19	607038	DFNB22 CT108
<i>OTOF</i>		603681	DFNB9 DFNB6 FER1L2
<i>OTOG</i>		604487	FLJ46346 OTGN mlemp
<i>OTOGL</i>		614925	C12orf64 FLJ90579
<i>OTOR</i>		606067	FDP MIAL MIAL1
<i>OTUD4</i>	NM_001366057:1 NM_001366058:1	611744	HSHIN1 DUBA6 KIAA1046
<i>OTULIN</i>		615712	FAM105B FLJ34884
<i>OTX2</i>		600037	
<i>OVOL2</i>		616441	bA504H3.3 ZNF339 CHED1 HOVO2 CHED
<i>OXCT1</i>	NM_001364299:5 NM_001364300:1 NM_001364303:1	601424	SCOT OXCT
<i>OXTR</i>		167055	OTR
<i>P2RX1</i>		600845	P2X1
<i>P2RX2</i>		600844	DFNA41 P2X2
<i>P2RX7</i>		602566	P2X7 MGC20089
<i>P2RY11</i>		602697	P2Y11
<i>P2RY12</i>		600515	P2Y12 SP1999 HORK3
<i>P3H1</i>		610339	MGC117314 LEPRECAN GROS1 LEPRE1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>P3H2</i>		610341	MLAT4 LEPREL1 FLJ10718
<i>P3R3URF</i>			
<i>P3R3URF-PIK3R3</i>			
<i>P4HA2</i>		600608	C-P4Halpα(II) lncRNA-PE
<i>P4HB</i>		176790	PO4HB PO4DB ERBA2L PROHB PDIA1 GIT P4Hbeta PDI DSI
<i>PABPN1</i>		602279	PABP2 OPMD PAB2
<i>PACRG</i>	NM_152410:6	608427	Glup HAK005771 PARK2CRG FLJ32724
<i>PACS1</i>		607492	FLJ10209 KIAA1175
<i>PADI3</i>		606755	PDI3
<i>PADI6</i>		610363	
<i>PAFAH1B1</i>		601545	MDS NudF LIS1 MDCR PAFAH
<i>PAFAH1B2</i>		602508	
<i>PAH</i>		612349	PH
<i>PAK3</i>		300142	hPAK3 MRX30 MRX47 bPAK
<i>PALB2</i>		610355	FLJ21816 FANCN
<i>PALLD</i>		608092	CGI-151 SIH002 KIAA0992
<i>PALM2AKAP2</i>	NM_007203:1-7 NM_001037293.2:all NM_053016.6:all NM_147150:1-7	604582	PALM2-AKAP2
<i>PAM16</i>		614336	TIMM16 Tim16 Magmas

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>PANK2</i>		606157	C20orf48 FLJ11729 PKAN HARP NBIA1 HSS
<i>PANX1</i>		608420	PX1 UNQ2529 MRS1
<i>PAPPA2</i>		619485	PLAC3 PAPP-A2 PAPPE
<i>PAPSS2</i>		603005	ATPSK2
<i>PARK7</i>		602533	DJ-1 DJ1 GATD2
<i>PARL</i>		607858	PSARL1 PRO2207 RHBDS1 PSARL
<i>PARN</i>		604212	DAN
<i>PARP1</i>		173870	Poly-PARP PARS PARP ADPRT PPOL ARTD1
<i>PARP10</i>		609564	ARTD10 FLJ14464
<i>PARS2</i>		612036	DKFZp727A071
<i>PASK</i>		607505	STK37 PASKIN KIAA0135
<i>PAX1</i>		167411	
<i>PAX2</i>	NM_001374303:3	167409	PAX-2
<i>PAX3</i>		606597	HUP2 PAX-3 WS1
<i>PAX4</i>	NM_001366110:3 NM_001366111:1,10	167413	MODY9
<i>PAX5</i>		167414	BSAP PAX-5
<i>PAX6</i>	NM_001368910:5	607108	AN2 AN D11S812E WAGR AN1
<i>PAX7</i>		167410	Hup1
<i>PAX8</i>		167415	PAX-8
<i>PAX9</i>		167416	

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>PBRM1</i>	NM_001350074:3,17 NM_001350076:3,17 NM_001350077:4,18 NM_001350078:3,17 NM_001350079:3 NM_001366070:2,16 NM_001366071:2,28 NM_001366072:2 NM_001366073:2 NM_001366074:3 NM_001366075:2,16 NM_001366076:2,15 NM_001394867:28 NM_001394868:27 NM_001394869:28 NM_001394870:2 NM_001394871:27 NM_001394878:3 NM_001394879:26 NM_001394880:2 NM_001400470:27 NM_001400471:15,28 NM_001400473:27	606083	BAF180 PB1 SMARCH1
<i>PC</i>		608786	PCB
<i>PCARE</i>		613425	FLJ34931 C2orf71 RP54
<i>PCBD1</i>		126090	PCD DCOH PCBD
<i>PCCA</i>	NM_001352609:22	232000	
<i>PCCB</i>		232050	
<i>PCDH12</i>		605622	
<i>PCDH15</i>	NM_001354429:33-34 NM_001384140:33-35	605514	USH1F DFNB23 CDHR15
<i>PCDH19</i>		300460	KIAA1313 EFMR EIEE9
<i>PCDHA1</i>	NM_018900:1 NM_031410.2:all NM_031411:1	606307	
<i>PCDHA10</i>	NM_018901:1 NM_031859.3:all NM_031860:1	606316	CNRN8 CNRS8 CNR8 PCDH-ALPHA10 CRNR8
<i>PCDHA11</i>	NM_018902:1 NM_031861.2:all	606317	PCDH-ALPHA11 CRNR7 CNRN7

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			CNRS7 CNR7
<i>PCDHA12</i>	NM_018903:1 NM_031864.3:all	606318	PCDH-ALPHA12
<i>PCDHA13</i>	NM_018904:1 NM_031865.1:all	606319	PCDH-ALPHA13 CRNR5 CNR5 CNRN5 CNRS5
<i>PCDHA2</i>	NM_018905:1 NM_031495.2:all NM_031496.2:all	606308	
<i>PCDHA3</i>		606309	PCDH-ALPHA3
<i>PCDHA4</i>	NM_018907:1 NM_031500.3:all	606310	CRNR1 CNR1 PCDH-ALPHA4 CNRN1
<i>PCDHA5</i>	NM_031501.1:all NM_018908:1	606311	CNRS6 CRNR6 CNRN6 CNR6 PCDH-ALPHA5
<i>PCDHA6</i>	NM_018909:1 NM_031848.3:all NM_031849:1	606312	CRNR2 CNRS2 CNR2 PCDH-ALPHA6
<i>PCDHA7</i>	NM_018910:1 NM_031852.1:all	606313	CNR4 CRNR4 CNRS4
<i>PCDHA8</i>	NM_031856.1:all NM_018911:1	606314	
<i>PCDHA9</i>	NM_031857:1 NM_014005.4:all	606315	PCDH-ALPHA9 KIAA0345
<i>PCDHAC1</i>	NM_018898:1 NM_031882.3:all	606320	
<i>PCDHAC2</i>	NM_018899:1 NM_031883.2:all	606321	PCDH-ALPHA-C2
<i>PCDHB4</i>		606330	PCDH-BETA4
<i>PCK1</i>		614168	PEPCK-C
<i>PCK2</i>		614095	PEPCK PEPCK2
<i>PCLO</i>		604918	ACZ DKFZp779G1236 KIAA0559
<i>PCM1</i>	NM_001352632:7 NM_001352633:9 NM_001352636:7 NM_001352637:7 NM_001352638:8 NM_001352643:7,28	600299	PTC4

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
	NM_001352650:9 NM_001352651:6 NM_001352654:26 NM_001352655:27 NM_001352656:28 NM_001352657:29 NM_001352658:27 NM_001352659:7 NM_001352660:9		
<i>PCNA</i>		176740	
<i>PCNT</i>		605925	KIAA0402 SCKL4 PCNTB KEN PCNT2 PCN
<i>PCOLCE2</i>		607064	PCPE2
<i>PCSK1</i>		162150	PC1 NEC1 PC1/3 SPC3 PC3
<i>PCSK7</i>	NM_004716:13-17	604872	LPC SPC7 PC7 PC8
<i>PCSK9</i>		607786	NARC-1 HCHOLA3 FH3
<i>PCYT1A</i>		123695	CT CTPCT PCYT1 CCTalpha
<i>PDCD1</i>		600244	PD-1 PD1 hSLE1 SLEB2 CD279
<i>PDCD10</i>		609118	TFAR15 CCM3
<i>PDE10A</i>		610652	
<i>PDE11A</i>		604961	
<i>PDE3A</i>	NM_001378408:17 NM_001378409:15	123805	CGI-PDE
<i>PDE4D</i>	NM_001349241:3 NM_001349242:3 NM_001364600:8 NM_001364602:6	600129	DPDE3
<i>PDE5A</i>		603310	
<i>PDE6A</i>		180071	PDEA

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			RP43
<i>PDE6B</i>		180072	PDEB CSNB3 RP40 CSNBAD2 rd1
<i>PDE6C</i>		600827	ACHM5 PDEA2 COD4
<i>PDE6D</i>		602676	JBTS22
<i>PDE6G</i>		180073	PDEG RP57
<i>PDE6H</i>		601190	
<i>PDE8B</i>	NM_001349749:2 NM_001349750:1-2 NM_001349752:1 NM_001376062:1 NM_001376066:1 NM_001376069:1-2 NM_001376070:1 NM_001376071:1 NM_001376072:1 NM_001376073:1 NM_001376074:1	603390	
<i>PDGFB</i>		190040	SIS SSV
<i>PDGFRA</i>	NM_001347827:17 NM_001347828:2 NM_001347830:1	173490	PDGFR2 GAS9 CD140a
<i>PDGFRB</i>		173410	JTK12 PDGFR CD140b PDGFR1
<i>PDGFRL</i>		604584	PRLTS
<i>PDHA1</i>		300502	PDHA E1alpha
<i>PDHB</i>		179060	E1beta PDHE1B
<i>PDHX</i>		608769	DLDBP E3BP proX PDX1 OPDX
<i>PDIA3</i>	NM_005313:1	602046	P58 ERp57 GRP58 GRP57 ERp60 ERp61

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			PI-PLC HsT17083
<i>PDK3</i>		300906	
<i>PDLIM3</i>		605889	ALP
<i>PDP1</i>		605993	PPM2A PDH PDP PPM2C
<i>PDPK1</i>	NM_002613:1-10 NM_001261816:1-10 NM_031268:1-7	605213	PDK1
<i>PDPR</i>	NM_017990:3-17 NM_001322117:3-17 NM_001322118:2-15 NM_001322119:9-15	617835	PDP3
<i>PDSS1</i>	NM_014317:2 NM_001321978:2	607429	COQ1A TPRT COQ1 TPT
<i>PDSS2</i>		610564	COQ1B bA59I9.3 C6orf210
<i>PDX1</i>		600733	MODY4 IDX-1 IUF-1 IPF1 GSF PDX-1 STF-1
<i>PDXK</i>		179020	PKH C21orf124 FLJ21324 MGC15873 PNK FLJ31940 C21orf97 PRED79
<i>PDYN</i>		131340	PENKB SCA23 ADCA
<i>PDZD7</i>		612971	bA108L7.8 DFNB57 PDZK7 FLJ23209
<i>PDZRN3</i>		609729	LNK3 KIAA1095 SEMCAP3 SEMACAP3
<i>PEAR1</i>	NM_001353682:3 NM_001353683:4	610278	JEDI FLJ00193

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			MEGF12
<i>PECR</i>		605843	TERP SDR29C1 HSA250303
<i>PEPD</i>		613230	
<i>PER2</i>		603426	KIAA0347
<i>PER3</i>		603427	
<i>PET100</i>		614770	C19orf79
<i>PEX1</i>		602136	ZWS ZWS1
<i>PEX10</i>		602859	RNF69
<i>PEX11B</i>		603867	PEX11beta PEX11β
<i>PEX12</i>		601758	
<i>PEX13</i>		601789	
<i>PEX14</i>		601791	
<i>PEX16</i>		603360	
<i>PEX19</i>		600279	HK33 PMP1 PXF PXMP1 D1S2223E PMP1
<i>PEX2</i>		170993	PXMP3 ZWS3 RNF72 PAF-1 PMP35
<i>PEX26</i>		608666	FLJ20695
<i>PEX3</i>		603164	
<i>PEX5</i>		600414	PXR1 PTS1R
<i>PEX6</i>		601498	PAF-2 PXAAA1
<i>PEX7</i>		601757	PTS2R RD
<i>PFKL</i>		171860	
<i>PFKM</i>	NM_001354735:4 NM_001354736:4 NM_001354740:1 NM_001354741:2	610681	PFK-1 PPP1R122 PFKX
<i>PFN1</i>		176610	
<i>PGAM1</i>	NM_002629:2-4 NM_001317079:2-4	172250	PGAM-B PGAMA
<i>PGAM2</i>		612931	PGAM-M
<i>PGAP1</i>		611655	Bst1 FLJ12377 SPG67
<i>PGAP2</i>		615187	MRT21 CWH43-N

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			FRAG1 MRT17
<i>PGAP3</i>		611801	PERLD1 PP1498 CAB2 PER1 MGC9753
<i>PGBD1</i>			HUCEP-4 dJ874C20.4 SCAND4
<i>PGBD3</i>			FLJ90201
<i>PGC</i>		169740	
<i>PGK1</i>		311800	
<i>PGM1</i>		171900	
<i>PGM3</i>		172100	PAGM AGM1 DKFZP434B187
<i>PGR</i>		607311	NR3C3 PR
<i>PGRMC1</i>		300435	HPR6.6
<i>PHB1</i>		176705	PHB
<i>PHC1</i>	NM_004426:7-8,15	602978	RAE28 HPH1 EDR1
<i>PHEX</i>		300550	HYP XLH PEX HPDR HYP1 HPDR1
<i>PHF21A</i>		608325	BM-006 KIAA1696 BHC80
<i>PHF6</i>		300414	MGC14797 KIAA1823 BFLS CENP-31 BORJ
<i>PHF8</i>		300560	ZNF422 JHDM1F KDM7B KIAA1111
<i>PHGDH</i>		606879	PGDH PDG SERA
<i>PHIP</i>	NM_017934:3	612870	FLJ20705 WDR11 ndrp DCAF14 BRWD2

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>PHKA1</i>		311870	PHKA
<i>PHKA2</i>		300798	PYK PHK
<i>PHKB</i>		172490	
<i>PHKG1</i>		172470	PHKG
<i>PHKG2</i>		172471	
<i>PHLDA1</i>		605335	PHRIP TDAG51 DT1P1B11
<i>PHOX2A</i>		602753	FEOM2 ARIX PMX2A CFEOM2
<i>PHOX2B</i>		603851	NBPhox PMX2B
<i>PHYH</i>		602026	PAHX PHYH1 RD
<i>PHYKPL</i>		614683	AGXT2L2 MGC15875
<i>PI4KA</i>	NM_058004:33-36,44-55 NM_001362862:32-35,43-54 NM_001362863:32-35,43-54	600286	PI4K-ALPHA PIK4CA pi4K230
<i>PIBF1</i>	NM_001349655:10	607532	PIBF CEP90 C13orf24
<i>PICALM</i>		603025	CLTH CALM
<i>PICK1</i>		605926	PRKCABP dJ1039K5 MGC15204
<i>PIEZ01</i>		611184	KIAA0233 FAM38A
<i>PIEZ02</i>	NM_022068:4 NM_001378183:4,18-19,35,40	613629	FLJ34907 HsT748 HsT771 FLJ23403 FAM38B C18orf30 FLJ23144 C18orf58 FAM38B2
<i>PIF1</i>		610953	C15orf20 FLJ22692
<i>PIGA</i>		311770	GPI3
<i>PIGG</i>		616918	LAS21 FLJ20265 GPI7
<i>PIGL</i>		605947	
<i>PIGM</i>		610273	GPI-MT-I

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>PIGN</i>		606097	MCD4 PIG-N
<i>PIGO</i>		614730	DKFZp434M222 FLJ00135
<i>PIGQ</i>		605754	GPI1 hGPI1
<i>PIGT</i>		610272	
<i>PIGV</i>		610274	FLJ20477
<i>PIGW</i>		610275	Gwt1 FLJ37433
<i>PIGY</i>		610662	MGC14156
<i>PIK3C2A</i>		603601	PI3K-C2alpha
<i>PIK3C2B</i>		602838	C2-PI3K PI3K-C2beta
<i>PIK3C2G</i>		609001	
<i>PIK3C3</i>		602609	Vps34 hVps34
<i>PIK3CA</i>	NM_006218:10-14	171834	PI3K
<i>PIK3CB</i>		602925	PIK3C1
<i>PIK3CD</i>		602839	p110D
<i>PIK3CG</i>		601232	
<i>PIK3R1</i>		171833	p85 p85-ALPHA GRB1
<i>PIK3R2</i>	NM_005027:6	603157	P85B p85
<i>PIK3R3</i>		606076	p55
<i>PIK3R4</i>		602610	VPS15 p150
<i>PIK3R5</i>		611317	P101-PI3K p101
<i>PIK3R6</i>		611462	p87PIKAP HsT41028 C17orf38 FLJ34500
<i>PIKFYVE</i>		609414	PIP5K3 p235 KIAA0981 MGC40423 PIP5K ZFYVE29 FAB1
<i>PIN1</i>		601052	dod
<i>PINK1</i>		608309	PARK6 BRPK
<i>PIP5K1C</i>		606102	LCCS3 PIP5Kgamma KIAA0589
<i>PITPNM3</i>		608921	CORD5 ACKR6

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			RDGBA3 NIR1
<i>PITRM1</i>	NM_001347729:1 NM_001347730:1	618211	PreP KIAA1104 MP1 hMP1
<i>PITX1</i>		602149	PTX1 POTX BFT
<i>PITX2</i>		601542	RGS RIEG1 IGDS RS Otlx2 Brx1 IHG2 RIEG ARP1 IRID2
<i>PITX3</i>		602669	ASMD
<i>PJVK</i>	NM_001353775:1 NM_001353776:1	610219	DFNB59
<i>PKD1</i>	NM_001009944:1,5,7,12,22,26 NM_000296:1,5,7,12,22,26	601313	PBP TRPP1 Pc-1
<i>PKD1L1</i>		609721	PRO19563
<i>PKD2</i>		173910	PC2 Pc-2 PKD4 TRPP2
<i>PKHD1</i>		606702	ARPKD FPC FCYT TIGM1
<i>PKLR</i>		609712	
<i>PKM</i>		179050	PKM2 OIP3 PK3 THBP1
<i>PKP1</i>		601975	B6P
<i>PKP2</i>		602861	
<i>PLA2G2A</i>		172411	PLA2B PLA2L
<i>PLA2G4A</i>		600522	cPLA2-alpha PLA2G4
<i>PLA2G5</i>		601192	
<i>PLA2G6</i>		603604	iPLA2 PARK14 PNPLA9 iPLA2beta

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			NBIA2
<i>PLA2G7</i>		601690	PAFAH LDL-PLA2
<i>PLAG1</i>		603026	ZNF912
<i>PLAGL1</i>		603044	ZAC LOT1
<i>PLAT</i>		173370	
<i>PLAU</i>		191840	UPA URK
<i>PLB1</i>		610179	FLJ30866 PLB
<i>PLCB1</i>		607120	PLC154 PLC-I KIAA0581
<i>PLCB4</i>		600810	
<i>PLCD1</i>		602142	
<i>PLCE1</i>		608414	NPHS3 PLCE KIAA1516
<i>PLCG2</i>		600220	
<i>PLCZ1</i>		608075	NYD-SP27 PLCzeta
<i>PLD3</i>		615698	HU-K4
<i>PLEC</i>		601282	PLEC1 EBS1 PCN PLTN
<i>PLEKHG2</i>		611893	CLG ARHGEF42 FLJ00018
<i>PLEKHG4</i>		609526	ARHGEF44 SCA4 DKFZP434I216
<i>PLEKHG5</i>		611101	Syx KIAA0720 GEF720 Tech
<i>PLEKHM1</i>	NM_014798:2,7-8 NM_001352825:2,7	611466	KIAA0356
<i>PLEKHM2</i>		609613	KIAA0842
<i>PLG</i>	NM_000301:19	173350	
<i>PLIN1</i>		170290	PLIN
<i>PLK4</i>		605031	Sak STK18
<i>PLN</i>		172405	CMD1P PLB
<i>PLOD1</i>		153454	LH1 LLH PLOD
<i>PLOD2</i>		601865	TLH

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			LH2
<i>PLOD3</i>		603066	LH3
<i>PLP1</i>		300401	PLP SPG2 GPM6C
<i>PLPBP</i>	NM_001349349:5	604436	PROSC
<i>PLS3</i>		300131	T-plastin
<i>PLVAP</i>		607647	PV1 FELS gp68 PV-1
<i>PLXND1</i>		604282	KIAA0620
<i>PML</i>		102578	MYL RNF71 TRIM19
<i>PMM2</i>		601785	CDG1a PMI1 CDG1 CDGS PMI
<i>PMP2</i>		170715	FABP8 M-FABP MP2
<i>PMP22</i>		601097	Sp110 HMSNIA HNPP CMT1A GAS3
<i>PMPCA</i>		613036	MAS2 INPP5E SCAR2 KIAA0123 CLA1 Alpha-MPP
<i>PMS1</i>	NM_001321051:5	600258	MLH2 PMSL1
<i>PMS2</i>	NM_000535:11-15 NM_001322003:11-15 NM_001322004:10-14 NM_001322005:11-15 NM_001322006:10-14 NM_001322007:10-14 NM_001322008:9-13 NM_001322009:11-15 NM_001322010:9-13 NM_001322011:11-15 NM_001322012:11-15 NM_001322013:10-14 NM_001322014:11-15 NM_001322015:11-15	600259	PMSL2 HNPPC4 PMS-2 MLH4 H_DJ0042M02.9

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>PMVK</i>		607622	PMKA HUMPMKI PMK
<i>PNKD</i>		609023	PDC DYT8 KIAA1184 TAHCCP2 FKSG19 MGC31943 PKND1 MR-1S FPD1 BRP17 KIPP1184 DKFZp564N1362 MR-1
<i>PNKP</i>		605610	PNK
<i>PNLIP</i>		246600	PL
<i>PNMT</i>		171190	PENT
<i>PNP</i>		164050	NP PUNP
<i>PNPLA1</i>	NM_001374623:9	612121	FLJ38755 dJ50J22.1
<i>PNPLA2</i>		609059	TTS-2.2 ATGL FP17548 iPLA2zeta desnutrin
<i>PNPLA3</i>		609567	iPLA2epsilon FLJ22012 adiponutrin ADPN dJ796I17.1 C22orf20
<i>PNPLA4</i>		300102	DXS1283E iPLA2eta GS2
<i>PNPLA6</i>		603197	sws NTE SPG39 iPLA2delta
<i>PNPLA8</i>		612123	IPLA2G iPLA2gamma IPLA2-2
<i>PNPO</i>		603287	PDXPO
<i>PNPT1</i>		610316	old-35 PNPase OLD35 DFNB70
<i>POC1A</i>		614783	DKFZP434C245

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			WDR51A
<i>POC1B</i>		614784	WDR51B TUWD12 FLJ14923
<i>POC1B-GALNT4</i>	NM_001199781:3 NM_001199782:3		
<i>POC5</i>		617880	MGC120442 FLJ35779 MGC120444 C5orf37 hPOC5 MGC120443
<i>PODXL</i>		602632	PC PODXL1 gp135 PCLP PDX Gp200
<i>POF1B</i>		300603	POF FLJ22792
<i>POFUT1</i>		607491	O-Fuc-T FUT12 O-FUT KIAA0180
<i>POGLUT1</i>		615618	9630046K23Rik hCLP46 Rumi KDELCL1 C3orf9 MDSRP KTELC1 MDS010 MGC32995
<i>POGLUT3</i>		618503	KDELCL2 MGC33424
<i>POGZ</i>		614787	KIAA0461 ZNF280E ZNF635
<i>POLA1</i>		312040	p180 POLA NSX
<i>POLD1</i>		174761	POLD CDC2
<i>POLD3</i>		611415	PPP1R128 P68 P66 KIAA0039
<i>POLE</i>		174762	POLE1
<i>POLE2</i>		602670	DPE2
<i>POLG</i>		174763	POLGA

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			POLG1
<i>POLG2</i>		604983	HP55 MTPOLB
<i>POLH</i>		603968	RAD30A XP-V
<i>POLK</i>	NM_001387111:6 NM_001395894:8	605650	POLQ DINP DINB1
<i>POLR1A</i>		616404	RP01-4 FLJ21915 RPA190 RPA1 DKFZP586M0122
<i>POLR1C</i>	NM_001363658:9	610060	RPA39 AC40 RPAC1 RPC40 RPA40 RPA5
<i>POLR1D</i>		613715	RPAC2 AC19 MGC9850 RPA9 RPA16 RP01-3
<i>POLR3A</i>		614258	hRPC155 RPC1 C160 RPC155
<i>POLR3B</i>		614366	RPC2 FLJ10388 C128
<i>POMC</i>		176830	LPH ACTH NPP POC CLIP MSH
<i>POMGNT1</i>		606822	LGMD20 MEB MGAT1.2 FLJ20277
<i>POMGNT2</i>		614828	FLJ14566 GTDC2 AGO61 C3orf39
<i>POMK</i>		615247	SgK196 FLJ23356
<i>POMP</i>		613386	UMP1 C13orf12

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			HSPC014
<i>POMT1</i>		607423	LGMD2K
<i>POMT2</i>		607439	LGMD2N
<i>PON1</i>		168820	PON ESA
<i>PON2</i>		602447	
<i>PON3</i>		602720	
<i>POP1</i>		602486	
<i>POR</i>	NM_001382655:3	124015	FLJ26468 CYPOR
<i>PORCN</i>		300651	PORC MG61 PPN DHOF por
<i>POT1</i>		606478	DKFZp586D211 hPot1
<i>POU1F1</i>		173110	PIT1 GHF-1 POU1F1a PIT-1
<i>POU3F4</i>		300039	DFNX2 BRN4 DFN3 OTF9
<i>POU4F3</i>		602460	DFNA42 BRN3C DFNA15 DFNA52
<i>POU5F1</i>		164177	OTF3 OCT3 Oct3/4 Oct4 MGC22487 OCT-4
<i>PPA2</i>		609988	FLJ20459
<i>PPAN-P2RY11</i>	NM_001040664:1-12 NM_001198690:1-12		
<i>PPARA</i>		170998	hPPAR NR1C1 PPAR
<i>PPARG</i>		601487	PPARgamma NR1C3 PPARG2 PPARG1
<i>PPARGC1B</i>		608886	PGC1B PERC
<i>PPIB</i>		123841	SCYLP OI9 PPIase

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			CYPB
			B
			CYP-S1
<i>PPM1B</i>		603770	PPC2BETAX PP2CB PP2CBETA
<i>PPM1D</i>		605100	Wip1 PP2C-DELTA
<i>PPM1K</i>		611065	DKFZp761G058 PP2Ckappa hPTMP BDP PP2Cm
<i>PPOX</i>		600923	VP PPO
<i>PPP1CB</i>		600590	MP PP-1B PP1B PP1beta PP1c PPP1beta
<i>PPP1R12B</i>		603768	MGC131980 MGC87886 PP1bp55 MYPT2
<i>PPP1R15B</i>		613257	FLJ14744
<i>PPP1R17</i>		604088	C7orf16 GSBS
<i>PPP1R3A</i>		600917	PPP1R3 GM
<i>PPP1R3C</i>		602999	PTG PPP1R5
<i>PPP2R1A</i>		605983	PR65A PP2AA PP2A-Aalpha
<i>PPP2R1B</i>		603113	PP2A-Abeta PR65B
<i>PPP2R2B</i>	NM_181677:3	604325	B55beta PR55-BETA SCA12 PR52B
<i>PPP2R5B</i>		601644	FLJ35411 B56beta B56B PR61B
<i>PPP2R5C</i>	NM_001352914:1	601645	B56gamma PR61G B56G
<i>PPP2R5D</i>		601646	B56D B56delta

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>PPT1</i>		600722	INCL CLN1 PPT
<i>PPT2</i>		603298	
<i>PQBP1</i>		300463	MRX55 MRXS8 RENS1 MRX2 MRXS3 SHS
<i>PRCC</i>		179755	RCCP1
<i>PRCD</i>		610598	RP36
<i>PRDM1</i>		603423	BLIMP1 PRDI-BF1
<i>PRDM12</i>	NM_021619:5	616458	PFM9
<i>PRDM13</i>		616741	PFM10
<i>PRDM16</i>		605557	KIAA1675 PFM13 KMT8F MGC166915 MEL1
<i>PRDM5</i>		614161	PFM2
<i>PRDM6</i>		616982	KMT8C PRISM
<i>PRDM8</i>		616639	KMT8D
<i>PRDM9</i>	NM_020227:11 NM_001310214:11 NM_001376900:11	609760	PFM6 ZNF899 MSBP3 KMT8B Meisetz
<i>PREPL</i>		609557	KIAA0436
<i>PRF1</i>		170280	P1 HPLH2 PFP
<i>PRG4</i>		604283	FLJ32635 MSF JCAP bG174L6.2 SZP HAPO CACP
<i>PRICKLE1</i>		608500	RILP FLJ31937 EPM1B
<i>PRICKLE2</i>		608501	DKFZp686D143
<i>PRICKLE3</i>		300111	LMO6
<i>PRIMA1</i>		613851	PRIMA
<i>PRIMPOL</i>		615421	CCDC111 FLJ33167
<i>PRKAA1</i>	NM_001355028:2	602739	AMPKa1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeq transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
	NM_001355034:6		
<i>PRKAA2</i>		600497	AMPK AMPKα2 PRKAA
<i>PRKAB1</i>		602740	
<i>PRKAB2</i>		602741	
<i>PRKACA</i>		601639	PKACα
<i>PRKACG</i>		176893	PKACγ
<i>PRKAG1</i>		602742	
<i>PRKAG2</i>		602743	CMH6 H91620p WPWS AAKG2 AAKG
<i>PRKAG3</i>		604976	
<i>PRKAR1A</i>		188830	TSE1 CNC1 PRKAR1
<i>PRKAR1B</i>		176911	
<i>PRKCA</i>		176960	PKCα PKCA
<i>PRKCB</i>		176970	PRKCB2 PKCB PKCβ PRKCB1
<i>PRKCD</i>	NM_001354676:1 NM_001354678:1	176977	
<i>PRKCG</i>		176980	PKCG SCA14 PKCC MGC57564 PKCγ
<i>PRKCQ</i>		600448	
<i>PRKCSH</i>		177060	PCLD VASAP-60 G19P1 PLD1 GIIB
<i>PRKDI</i>		605435	PKCM PRKCM PKD PKC-mu
<i>PRKDC</i>		600899	DNAPK p350 p460 DNAPKc DNA-PKC DNA-PKcs HYRC1 XRCC7

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			DNPK1 HYRC
<i>PRKG1</i>		176894	PKG1 PKG PRKGR1B PRKG1B PGK
<i>PRKN</i>		602544	PARK2 AR-JP parkin PDJ
<i>PRKRA</i>		603424	PACT RAX HSD14 DYT16
<i>PRLR</i>		176761	
<i>PRM2</i>		182890	CT94.2
<i>PRMT7</i>	NM_001351143:20	610087	KIAA1933 FLJ10640
<i>PRMT9</i>		616125	FLJ46629 PRMT10
<i>PRND</i>		604263	DOPPEL DPL PrPLP dJ1068H6.4
<i>PRNP</i>		176640	GSS PRP PRIP CD230 CJD AltPrP
<i>PROC</i>		612283	
<i>PROCR</i>		600646	CCD41 EPCR CD201
<i>PRODH</i>		606810	HSPOX2 TP53I6 PIG6 PRODH1 PRODH2
<i>PRODH2</i>		616377	HSPOX1
<i>PROK2</i>		607002	KAL4 MIT1 PK2 BV8
<i>PROKR2</i>		607123	PKR2 GPR73b dJ680N4.3 GPRg2 KAL3

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			GPR73L1
<i>PROM1</i>		604365	RP41 AC133 STGD4 CORD12 MCDR2 CD133 PROML1
<i>PROP1</i>		601538	
<i>PROS1</i>		176880	PROS
<i>PROZ</i>		176895	PZ
<i>PRPF3</i>		607301	RP18 hPrp3 SNRNP90 Prp3
<i>PRPF31</i>		606419	SNRNP61 hPrp31 PRP31 NY-BR-99 RP11
<i>PRPF4</i>		607795	PRP4 SNRNP60 Prp4p HPRP4P HPRP4
<i>PRPF6</i>		613979	RP60 Prp6 C20orf14 bB152O15.1 TOM U5-102K SNRNP102 ANT-1 hPrp6
<i>PRPF8</i>		607300	hPrp8 PRPC8 RP13 SNRNP220 Prp8
<i>PRPH</i>		170710	PRPH1 NEF4
<i>PRPH2</i>		179605	RP7 CACD2 rd2 TSPAN22 RDS
<i>PRPS1</i>		311850	PRS-I DFN2 PPRibP DFNX1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			CMTX5
<i>PRRT2</i>		614386	PKC FLJ25513 EKD1 FICCA IFITMD1 DYT10 DSPB3 ICCA DKFZp547J199
<i>PRRX1</i>		167420	PMX1 PHOX1
<i>PRSS1</i>		276000	TRY1
<i>PRSS12</i>		606709	BSSP-3 MRT1
<i>PRSS56</i>		613858	
<i>PRUNE1</i>		617413	H-PRUNE PRUNE DRES-17 HTCD37
<i>PRX</i>		605725	KIAA1620
<i>PSAP</i>		176801	SAP1 SAP2 GLBA
<i>PSAT1</i>		610936	PSAT PSA
<i>PSEN1</i>		104311	PS1 AD3 FAD S182
<i>PSEN2</i>		600759	AD3L PS2 AD4 STM2
<i>PSENE1</i>		607632	PEN2
<i>PSMA3</i>		176843	HC8
<i>PSMB4</i>		602177	PROS26 HN3
<i>PSMB8</i>		177046	beta5i PSMB5i RING10 LMP7 D6S216E
<i>PSMB9</i>		177045	PSMB6i LMP2 beta1i RING12
<i>PSMC3IP</i>		608665	Hop2 HUMGT198A GT198

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			TBPIP
<i>PSMD1</i>		617842	P112 Rpn2 S1
<i>PSPH</i>		172480	PSP
<i>PSPN</i>		602921	PSP
<i>PSTPIP1</i>		606347	CD2BP1 PSTPIP CD2BP1S H-PIP CD2BP1L PAPAS
<i>PTCH1</i>		601309	PTCH NBCCS BCNS
<i>PTCH2</i>		603673	
<i>PTCHD1</i>		300828	FLJ30296
<i>PTDSS1</i>		612792	PSS1 KIAA0024 PSSA
<i>PTEN</i>	NM_000314:9 NM_001304717:10 NM_001304718:9	601728	MHAM MMAC1 BZS PTEN1 TEP1
<i>PTF1A</i>		607194	bHLHa29 PTF1-p48 p48
<i>PTGFR</i>		600563	FP
<i>PTGIS</i>		601699	CYP8A1 PGIS
<i>PTGS1</i>		176805	PGHS-1 COX1 PTGHS
<i>PTGS2</i>		600262	COX2
<i>PTH</i>		168450	PTH1
<i>PTH1R</i>		168468	PTHR PTHR1
<i>PTHLH</i>		168470	PLP HHM PTHR PTHRP
<i>PTPN11</i>		176876	PTP2C NS1 SHP2 BPTP3 SHP-2 SH-PTP2
<i>PTPN12</i>		600079	PTPG1 PTP-PEST

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>PTPN13</i>		600267	PTP-BL PTPL1 PTP1E PTP-BAS
<i>PTPN14</i>		603155	PTPD2 PEZ
<i>PTPN21</i>		603271	PTPD1 PTPRL10
<i>PTPN22</i>		600716	Lyp Lyp1 Lyp2 PTPN8
<i>PTPN23</i>		606584	HD-PTP KIAA1471 DKFZP564F0923
<i>PTPRC</i>		151460	CD45 GP180 T200 LCA
<i>PTPRD</i>		601598	PTPD HPTP
<i>PTPRF</i>		179590	LAR
<i>PTPRJ</i>		600925	HPTPeta DEP1 CD148
<i>PTPRO</i>		600579	GLEPP1 PTP-oc NPHS6 PTP-U2 PTPU2
<i>PTPRQ</i>		603317	DFNB84
<i>PTPRT</i>	NM_001394024:22	608712	RPTPrho KIAA0283
<i>PTRH2</i>		608625	CFAP37 CGI-147 PTH2 BIT1
<i>PTS</i>		612719	PTPS
<i>PTX3</i>		602492	TNFAIP5 TSG-14
<i>PUF60</i>	NM_001362895:2 NM_001362896:2 NM_001362897:2	604819	FIR SIAHBP1 RoBPI
<i>PURA</i>		600473	PURALPHA PUR1 PUR-ALPHA
<i>PUS1</i>		608109	MLASA1
<i>PUS3</i>		616283	DEG1 FKSG32
<i>PXDN</i>		605158	D2S448

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			PRG2 KIAA0230 PXN D2S448E MG50
PXDNL		615904	PMR1 FLJ25471
PYCR1		179035	P5C
PYCR2		616406	P5CR2
PYGL		613741	GSD6
PYGM		608455	GSD5
PYGO2		606903	
PYROXD1	NM_024854:12 <i>NM_001350912:12</i> <i>NM_001350913:11</i>	617220	DKFZp762G094 FLJ22028
PYY		600781	PYY1
QARS1		603727	QARS
QDPR		612676	PKU2 DHPR SDR33C1
QRSL1		617209	FLJ10989 FLJ13447 GATA FLJ12189 GatA DKFZP564C1278
RAB10		612672	
RAB18		602207	
RAB23		606144	
RAB27A		603868	HsT18676 RAB27 RAM GS2
RAB28		612994	
RAB33B		605950	DKFZP434G099
RAB39B		300774	WSN MRX72
RAB3A		179490	
RAB3GAP1		602536	RAB3GAP130 WARBM1 RAB3GAP KIAA0066
RAB3GAP2		609275	SPG69 KIAA0839 RAB3-GAP150 DKFZP434D245
RAB40AL		300405	RLGP RAR2
<i>RAB7A</i>		602298	RAB7 CMT2B

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>RAC1</i>		602048	Rac-1 TC-25 p21-Rac1
<i>RAC2</i>		602049	EN-7
<i>RAD18</i>		605256	RNF73
<i>RAD21</i>		606462	SCC1 hHR21 KIAA0078
<i>RAD50</i>		604040	RAD50-2 hRad50
<i>RAD51</i>	NM_001164269:4 NM_133487:4	179617	RECA HsRad51 FANCR RAD51A BRCC5 HsT16930
<i>RAD51B</i>		602948	R51H2 REC2 RAD51L1 hREC2
<i>RAD51C</i>		602774	RAD51L2 FANCO
<i>RAD51D</i>		602954	HsTRAD RAD51L3 R51H3 Trad
<i>RAD54B</i>		604289	RDH54
<i>RAD54L</i>		603615	hRAD54 RAD54A hHR54
<i>RAF1</i>	NM_001354689:8 NM_001354694:7	164760	CRAF c-Raf Raf-1
<i>RAG1</i>		179615	RNF74 MGC43321
<i>RAG2</i>		179616	
<i>RAI1</i>		607642	KIAA1820 SMS MGC12824 SMCR DKFZP434A139
<i>RALGDS</i>		601619	RalGEF RGF RGDS
<i>RANBP2</i>	NM_006267:8,11,13	601181	NUP358 ANE1 ADANE
<i>RANGAP1</i>		602362	SD Fug1 KIAA1835

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>RANGRF</i>		607954	MOG1 HSPC165 HSPC236 RANGNRF
<i>RAP1A</i>		179520	KREV-1 SMGP21
<i>RAP1B</i>		179530	DKFZp586H0723 RAL1B K-REV
<i>RAP1GDS1</i>		179502	SmgGDS
<i>RAPGEF2</i>	NM_001351724:1-7,27 NM_001351725:2-4 NM_001351726:2-4 NM_001351727:21 NM_001351728:21 NM_001394067:1-7	609530	DKFZP586O1422 PDZ-GEF1 PDZGEF1 KIAA0313 RA-GEF
<i>RAPSN</i>		601592	CMS1E RNF205 CMS1D
<i>RARA</i>		180240	NR1B1 RAR-alpha RAR RARalpha
<i>RARB</i>		180220	HAP RRB2 NR1B2 RARbeta RAR-beta
<i>RARRES1</i>		605090	LXNL TIG1
<i>RARS1</i>		107820	RARS DALRD1
<i>RARS2</i>	NM_001350505:21 NM_001350506:21	611524	dJ382110.6 MGC23778 RARSL PRO1992 DALRD2 MGC14993
<i>RASA1</i>		139150	RASA p120GAP p120 GAP p120RASGAP CM-AVM
<i>RASA2</i>		601589	GAP1M
<i>RASA3</i>		605182	GAP1IP4BP GAPIII
<i>RASAL1</i>		604118	RASAL
<i>RASAL2</i>		606136	nGAP
<i>RASAL3</i>	NM_001400381:12	616561	FLJ21438

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>RASGEF1A</i>		614531	CG4853 FLJ37817
<i>RASGEF1B</i>		614532	FLJ31695 GPIG4
<i>RASGRF1</i>		606600	PP13187 GNRP CDC25 GRF55 CDC25L GRF1 H-GRF55
<i>RASGRF2</i>		606614	Ras-GRF2 GRF2
<i>RASGRP1</i>		603962	CaLDAG-GEFII RASGRP
<i>RASGRP2</i>		605577	CALDAG-GEFI
<i>RASGRP3</i>		609531	GRP3 KIAA0846 CaLDAG-GEFIII
<i>RASGRP4</i>		607320	
<i>RAX</i>		601881	RX
<i>RAX2</i>		610362	MGC15631 ARMD6 CORD11 RAXL1
<i>RB1</i>		614041	PPP1R130 OSRC RB
<i>RB1CC1</i>		606837	ATG17 KIAA0203 Cc1 DRAGOU14 FIP200 PPP1R131
<i>RBBP6</i>		600938	PACT SNAMA P2P-R
<i>RBBP8</i>		604124	SCKL2 RIM COM1 CtIP
<i>RBCK1</i>		610924	HOIL1 ZRANB4 RNF54 UBCE7IP3 C20orf18 XAP4 RBCK2
<i>RBFOX1</i>		605104	HRNBP1 A2BP1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			FOX-1
<i>RBFox2</i>	NM_001349982:1,12 NM_001349983:11 NM_001349989:1 NM_001349990:1 NM_001349991:1,12 NM_001349992:1 NM_001349994:1 NM_001349995:1 NM_001349996:1 NM_001349998:11	612149	FOX-2 RBM9 HNRBP2 HRNBP2
<i>RBFox3</i>	NM_001385804:14 NM_001385805:21 NM_001385806:14 NM_001385825:14 NM_001385826:15	616999	HRNBP3 NeuN FOX-3
<i>RBL1</i>		116957	p107 cp107 PRB1
<i>RBM10</i>		300080	DXS8237E ZRANB5 GPATCH9 S1-1 KIAA0122 GPATC9
<i>RBM20</i>		613171	
<i>RBM28</i>		612074	FLJ10377
<i>RBM7</i>		612413	
<i>RBMX</i>		300199	hnRNP-G HNRNPG RNMX
<i>RBP1</i>		180260	RBPC CRBP1 CRABP-I CRBP CRBPI
<i>RBP3</i>		180290	RP66 D10S65 D10S66 D10S64
<i>RBP4</i>		180250	
<i>RBPJ</i>		147183	RBPJK RBPSUH RBP-J CBF1 IGKJRB1 SUH IGKJRB KBF2
<i>RBSN</i>		609511	ZFYVE20

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>RCBTB1</i>	NM_001352505:10	607867	CLLL7 FLJ10716 CLLD7
<i>RCOR1</i>		607675	COREST KIAA0071 RCOR
<i>RD3</i>		180040	LCA12 C1orf36
<i>RDH11</i>		607849	ARSDR1 MDT1 SDR7C1
<i>RDH12</i>		608830	RP53 SDR7C2 FLJ30273 LCA13
<i>RDH5</i>		601617	SDR9C5 HSD17B9 RDH1
<i>RDX</i>		179410	DFNB24
<i>RECQL</i>	NM_002907:14-15 NM_032941:15-16	600537	RecQL1 RecQ1
<i>RECQL4</i>		603780	RecQ4
<i>RECQL5</i>		603781	FLJ90603 RecQ5
<i>REEP1</i>	NM_001371279:7-8	609139	SPG31 Yip2a C2orf23 FLJ13110
<i>REEP2</i>		609347	SPG72 SGC32445 Yip2d C5orf19
<i>REL</i>		164910	HIVEN86A c-Rel I-Rel
<i>RELA</i>		164014	NFKB3 p65
<i>RELN</i>		600514	RL PRO1598
<i>REN</i>		179820	
<i>REPS1</i>		614825	
<i>RERE</i>		605226	KIAA0458 ATN1L ARP ATN2 ARG DNB1
<i>REST</i>		600571	DFNA27 XBR NRSF

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>RET</i>		164761	PTC MEN2A CDHF12 CDHR16 HSCR1 MTC1 MEN2B RET51
<i>RETREG1</i>		613114	FAM134B FLJ20152 JK1
<i>REV3L</i>		602776	REV3 POLZ
<i>RFC1</i>		102579	RFC140 A1 PO-GA MHCBBF
<i>RFT1</i>		611908	CDG1N
<i>RFX5</i>		601863	
<i>RFX6</i>		612659	RFXDC1 MGC33442 dJ955L16.1
<i>RFXANK</i>	NM_001370237:9 NM_001370238:9	603200	MGC138628 ANKRA1 BLS RFX-B F14150_1
<i>RFXAP</i>		601861	
<i>RGR</i>		600342	RP44
<i>RGS2</i>		600861	G0S8
<i>RGS4</i>		602516	SCZD9
<i>RGS6</i>	NM_001370270:18 NM_001370271:18 NM_001370272:18 NM_001370273:18 NM_001370274:18 NM_001370275:18 NM_001370276:18 NM_001370277:18-19 NM_001370278:18 NM_001370279:18 NM_001370280:17 NM_001370281:18 NM_001370282:18 NM_001370283:17 NM_001370286:16	603894	
<i>RGS7</i>		602517	
<i>RGS9</i>		604067	MGC26458 RGS9L PERRS

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			MGC111763
<i>RGS9BP</i>		607814	R9AP PERRS FLJ45744
<i>RHAG</i>		180297	RH50A SLC42A1 CD241
<i>RHBDF2</i>		614404	FLJ22341 TOCG iRhom2 RHBDL6 TOC RHBDL5
<i>RHEB</i>		601293	RHEB2
<i>RHNO1</i>		614085	C12orf32 MGC13204 RHINO HKMT1188
<i>RHO</i>		180380	RP4 OPN2 CSNBAD1
<i>RHOH</i>		602037	TTF ARHH
<i>RIC3</i>		610509	PRO1385 FLJ11608 AYST720
<i>RICTOR</i>		609022	KIAA1999 AVO3 MGC39830 PIA
<i>RILP</i>		607848	FLJ31193
<i>RIMS1</i>	NM_001350414:17 NM_001350416:18 NM_001350421:2 NM_001350424:2 NM_001350425:17 NM_001350428:2 NM_001350430:2 NM_001350437:2 NM_001350450:2 NM_001350452:17-18 NM_001350459:2 NM_001350460:16 NM_001350462:2 NM_001350466:17 NM_001350471:2	606629	RAB3IP2 RIM1 CORD7 KIAA0340 RIM
<i>RIN2</i>		610222	RASSF4
<i>RINT1</i>		610089	FLJ11785 RINT-1
<i>RIPK4</i>		605706	DIK

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			ANKK2 ANKRD3 RIP4 PKK
<i>RIPOR2</i>		611410	KIAA0386 FAM65B C6orf32 DIFF48 MYONAP
<i>RIPPLY1</i>		300575	
<i>RIPPLY2</i>		609891	dJ237115.1 C6orf159
<i>RIT1</i>		609591	ROC1 RIT RIBB MGC125865 MGC125864
<i>RIT2</i>		609592	RIBA RIN
<i>RLBP1</i>		180090	CRALBP
<i>RLIM</i>		300379	MGC15161 NY-REN-43 RNF12
<i>RMND1</i>		614917	RMD1 C6orf96 FLJ20627 bA351K16.3
<i>RNASEH1</i>		604123	
<i>RNASEH2A</i>		606034	RNHL RNASEHI RNHIA AGS4
<i>RNASEH2B</i>		610326	DLEU8 AGS2 FLJ11712
<i>RNASEH2C</i>		610330	AGS3 AYP1
<i>RNASEL</i>		180435	PRCA1 RNS4
<i>RNASET2</i>		612944	bA514012.3 FLJ10907 RNASE6PL
<i>RNF113A</i>		300951	Cwc24 ZNF183 RNF113
<i>RNF125</i>		610432	FLJ20456
<i>RNF135</i>		611358	MGC13061
<i>RNF139</i>		603046	HRCA1 TRC8 RCA1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>RNF168</i>		612688	FLJ35794
<i>RNF170</i>		614649	ADSA SNAX1 DKFZP564A022
<i>RNF186</i>		617163	FLJ20225
<i>RNF19A</i>		607119	dorfin DKFZp566B1346 RNF19
<i>RNF20</i>		607699	hBRE1 FLJ20382 BRE1A BRE1 KAIA2779 FLJ11189
<i>RNF212</i>	NM_001366918:10-11 NM_001366919:10-12	612041	LOC285498 FLJ38841
<i>RNF213</i>		613768	KIAA1618 NET57 AL017 KIAA1554 MYMY2 C17orf27
<i>RNF216</i>		609948	TRIAD3 ZIN UBCE7IP1
<i>RNF31</i>		612487	ZIBRA FLJ10111 Paul FLJ23501 HOIP
<i>RNF43</i>		612482	FLJ20315 DKFZp781H0392 URCC
<i>RNF6</i>		604242	DKFZp686P0776
<i>RNLS</i>		609360	C10orf59 renalase FLJ11218
<i>RNPC3</i>		618016	FLJ20008 RBM40 KIAA1839 SNRNP65
<i>ROBO1</i>		602430	SAX3 DUTT1 FLJ21882
<i>ROBO2</i>	NM_001378190:25 NM_001378191:21,26 NM_001378192:1,26 NM_001378193:25 NM_001378194:1,22 NM_001378195:21	602431	KIAA1568

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
	NM_001378196:21 NM_001378197:21 NM_001378198:1 NM_001378199:1 NM_001394212:1,21,26 NM_001394213:1,22 NM_001394214:1 NM_001395656:26 NM_001395657:1,21		
<i>ROBO3</i>		608630	RBIG1 HGPPS HGPS FLJ21044
<i>ROGDI</i>		614574	FLJ22386 RAV2 ROGD1
<i>ROM1</i>		180721	TSPAN23 ROM
<i>ROR2</i>		602337	NTRKR2 BDB BDB1
<i>RORB</i>	NM_001365023:1	601972	RZRB NR1F2 ROR-BETA
<i>RORC</i>		602943	NR1F3 RZRG RORG TOR
<i>RP1</i>	NM_001375654:4-30	603937	ORP1 DCDC4A
<i>RP1L1</i>		608581	DCDC4B
<i>RP2</i>		300757	TBCCD2 NM23-H10 NME10
<i>RP9</i>	NM_203288:6	607331	PAP-1
<i>RPE65</i>		180069	RP20 BCO3 LCA2 rd12
<i>RPGR</i>	NM_001367248:1	312610	CORDX1 RP3 COD1 RP15 CRD
<i>RPGRIP1</i>		605446	RG11 LCA6 RPGRIP CORD13
<i>RPGRIP1L</i>		610937	FTM CORS3

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			PPP1R134 NPHP8 MKS5 JBTS7 KIAA1005
<i>RPIA</i>		180430	
<i>RPL10</i>		312173	L10 NOV DXS648 QM DXS648E FLJ23544
<i>RPL11</i>		604175	uL5 L11
<i>RPL15</i>		604174	RPL10 EC45 RPYL10 RPLY10 L15
<i>RPL19</i>		180466	MGC71997 DKFZp779D216 FLJ27452 L19
<i>RPL21</i>		603636	MGC104275 MGC104274 FLJ27458 DKFZp686C06101 L21 MGC71252
<i>RPL23</i>		603662	rpL17 L23
<i>RPL26</i>		603704	L26
<i>RPL27</i>		607526	L27
<i>RPL31</i>		617415	L31
<i>RPL35A</i>		180468	GIG33 eL33 L35A
<i>RPL36</i>		617893	DKFZp566B023 L36
<i>RPL36A-HNRNPH2</i>	NM_001199973:1-4 NM_001199974:1-3		
<i>RPL5</i>		603634	PPP1R135 uL18 L5
<i>RPN2</i>	NM_002951:1 NM_001135771:1 NM_001324299:1 NM_001324301:1 NM_001324302:1 NM_001324303:1	180490	RPNII RIBIIR SWP1 RPN-II

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
	NM_001324304:1 NM_001324305:1		
<i>RPS10</i>		603632	S10 MGC88819
<i>RPS10-NUDT3</i>	NM_001202470:6-9		
<i>RPS14</i>		130620	EMTB S14
<i>RPS15</i>		180535	MGC111130 RIG S15
<i>RPS19</i>		603474	DBA eS19 LOH19CR1 S19
<i>RPS20</i>		603682	uS10 S20
<i>RPS24</i>		602412	eS24 S24
<i>RPS26</i>		603701	eS26 S26
<i>RPS27</i>		603702	MPS-1 S27 MPS1
<i>RPS27A</i>		191343	S27A Uba80 UBCEP80
<i>RPS28</i>		603685	eS28 S28
<i>RPS29</i>	NM_001351375:1	603633	S29 uS14
<i>RPS6KA1</i>		601684	RSK1 MAPKAPK1 HU-1 p90Rsk
<i>RPS6KA2</i>		601685	RSK3 HU-2
<i>RPS6KA3</i>		300075	HU-3 RSK2 CLS MRX19
<i>RPS7</i>		603658	S7 eS7
<i>RPSA</i>		150370	LAMR1 LRP p40 SA 37LRP
<i>RPTOR</i>		607130	KIAA1303 Mip1 raptor

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			KOG1
<i>RPUSD3</i>	NM_001351736:1	617759	MGC29784
<i>RRAGA</i>		612194	FIP-1 RAGA
<i>RRAGC</i>		608267	FLJ13311 GTR2
<i>RRAS</i>		165090	R-Ras
<i>RRAS2</i>	NM_012250:6 NM_001102669:6 NM_001177314:6 NM_001177315:6	600098	TC21
<i>RREB1</i>		602209	HNT
<i>RRM1</i>		180410	
<i>RRM2B</i>		604712	p53R2
<i>RRP8</i>		615818	NML KIAA0409
<i>RS1</i>		300839	RS XLRS1
<i>RSPH1</i>		609314	CILD24 FLJ32753 TSGA2 RSP44 RSPH10A
<i>RSPH3</i>		615876	dJ111C20.1 RSHL2 RSP3
<i>RSPH4A</i>		612647	CILD11 RSHL3 dJ412I7.1 FLJ37974 RSPH6B
<i>RSPH9</i>		612648	MRPS18AL1 C6orf206 CILD12 FLJ30845
<i>RSP01</i>		609595	RSPONDIN FLJ40906
<i>RSP04</i>		610573	dJ824F16.3 C20orf182
<i>RSPRY1</i>		616585	KIAA1972
<i>RTEL1</i>		608833	RTEL NHL KIAA1088 DKFZP434C013 bK3184A7.3 C20orf41
<i>RTN2</i>		603183	NSPL1 NSP2 SPG12
<i>RTN4IP1</i>		610502	NIMP

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>RTTN</i>		610436	DKFZP434G145
<i>RUBCN</i>		613516	rubicon KIAA0226 rundataxin
<i>RUNDC1</i>		619250	DKFZp761H0421
<i>RUNX1</i>		151385	PEBP2A2 AMLCR1 CBFA2 AML1
<i>RUNX2</i>		600211	PEBP2aA1 CBFA1 AML3 PEBP2A1 CCD1 CCD
<i>RUSC2</i>		611053	KIAA0375
<i>RUVBL2</i>		604788	TIP48 ECP51 Rvb2 TIH2 INO80J RVB2 Reptin52 TIP49b
<i>RXYLT1</i>		605862	HP10481 TMEM5
<i>RYR1</i>		180901	CCO RYR MHS1 PPP1R137 MHS
<i>RYR2</i>		180902	ARVC2 VTSIP ARVD2
<i>S100A8</i>		123885	CAGA CGLA P8 CFAG 60B8AG S100-A8 MRP-8 MRP8
<i>S1PR2</i>		605111	H218 EDG5 AGR16 Gpcr13 DFNB68
<i>S1PR3</i>		601965	bA791021.3 EDG3 C9orf108

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			FLJ37523 EDG-3 C9orf47
SAA1	NM_000331:3 NM_001178006:4 NM_199161:3	104750	TP53I4 PIG4 SAA
SAA2-SAA4	NM_001199744:2-3		
SAA4		104752	C-SAA CSAA
SACS		604490	ARSACS SPAX6 DKFZp686B15167 PPP1R138 DNAJC29 KIAA0730
SAG		181031	RP47 ARRESTIN
SALL1		602218	TBS Hsa1 ZNF794
SALL2		602219	KIAA0360 ZNF795 Hsa2
SALL4		607343	ZNF797 dJ1112F19.1
SAMD11	NM_001385640:1 NM_001385641:1	616765	MGC45873
SAMD9		610456	FLJ20073 C7orf5 KIAA2004
SAMD9L		611170	FLJ39885 KIAA2005 C7orf6
SAMHD1	NM_001363733:16	606754	Mg11 AGS5 MOP-5 HDDC1 SBB188
SAR1B		607690	SARA2
SARDH		604455	DMGDHL1 SDH
SARS2		612804	SYS SerRSmt SARS SERS mtSerRS SARSM FLJ20450
SART3		611684	KIAA0156 TIP110

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			p110 RP11-13G14
<i>SASH1</i>		607955	dJ323M4.1 KIAA0790 SH3D6A
<i>SASS6</i>		609321	FLJ22097 DKFZp761A078 SAS6 SAS-6
<i>SATB2</i>		608148	FLJ21474 KIAA1034
<i>SBDS</i>		607444	SDS CGI-97 SWDS FLJ10917 SDO1
<i>SBF1</i>		603560	MTMR5 DENND7A
<i>SBF2</i>	NM_001386339:29	607697	MTMR13 CMT4B2 DENND7B KIAA1766
<i>SC5D</i>		602286	SC5DL
<i>SCARB1</i>	NM_001367982:1	601040	SR-BI CLA1 CD36L1 CLA-1 SRB1
<i>SCARB2</i>		602257	LIMPII LIMP-2 SR-BII HLGP85 CD36L2
<i>SCARF2</i>		613619	SREC-II SREC2 HUMZD58C02
<i>SCG5</i>		173120	SGNE1 7B2 SgV
<i>SCLT1</i>		611399	FLJ30655 hCAP-1A
<i>SCN10A</i>		604427	hPN3 Nav1.8 SNS PN3
<i>SCN11A</i>		604385	SCN12A SNS-2 Nav1.9 NaN
<i>SCN1A</i>		182389	SMEI

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			SCN1 FEB3 Nav1.1 NAC1 GEFSP2 HBSCI
<i>SCN1B</i>		600235	
<i>SCN2A</i>		182390	SCN2A1 SCN2A2 HBSCI HBSCII Nav1.2
<i>SCN2B</i>		601327	
<i>SCN3A</i>		182391	Nav1.3
<i>SCN3B</i>		608214	HSA243396 SCNB3
<i>SCN4A</i>		603967	HYPP Nav1.4 HYKPP SkM1
<i>SCN4B</i>		608256	LQT10
<i>SCN5A</i>		600163	HB2 ICCD LQT3 CMPD2 CDCD2 Nav1.5 HH1 HB1 IVF HBBB CMD1E PFHB1 SSS1
<i>SCN7A</i>		182392	Nav2.2 Nav2.1 NaG SCN6A
<i>SCN8A</i>		600702	CerIII CIAT MED NaCh6 Nav1.6 PN4
<i>SCN9A</i>		603415	NE-NA Nav1.7 ETHA NENA PN1
<i>SCNM1</i>		608095	MGC3180

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>SCNN1A</i>		600228	SCNN1 ENaCalpha
<i>SCNN1B</i>		600760	ENaCbeta
<i>SCNN1G</i>		600761	ENaCgamma SCNEG
<i>SC01</i>		603644	SCOD1
<i>SC02</i>		604272	SC01L MYP6
<i>SCP2</i>	NM_001007098:11 NM_001330587:12	184755	
<i>SCRIB</i>		607733	Vartul KIAA0147 SCRIB1
<i>SCYL1</i>		607982	NKTL TEIF TAPK NTKL MGC78454 HT019 TRAP P105 GKLP
<i>SDC3</i>	NM_014654:1	186357	SYND3 N-syndecan
<i>SDCCAG8</i>	NM_001350248:7	613524	SLSN7 CCCAP NPHP10 NY-CO-8 BBS16
<i>SDHA</i>		600857	SDH2 SDHF FP
<i>SDHAF1</i>		612848	LYRM8
<i>SDHAF2</i>		613019	FLJ20487 PGL2 C11orf79 SDH5
<i>SDHB</i>		185470	SDH1 SDH
<i>SDHC</i>		602413	cybL PGL3 CYB560
<i>SDHD</i>	NM_001276506:4	602690	PGL PGL1 cybS
<i>SDR9C7</i>		609769	SDR-O RDHS
<i>SEC13</i>		600152	SEC13L1 npp-20 D3S1231E

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			SEC13R
<i>SEC23A</i>		610511	
<i>SEC23B</i>		610512	HEMPAS CDAN2 CDAII CDA-II
<i>SEC24B</i>		607184	
<i>SEC24D</i>		607186	KIAA0755
<i>SEC61A1</i>	NM_001400328:1	609213	
<i>SEC63</i>		608648	ERdj2 SEC63L PRO2507 DNAJC23
<i>SECISBP2</i>		607693	SBP2
<i>SELENON</i>	NM_020451:1 NM_206926:1	606210	RSMD1 SEPN1 SELN RSS MDRS1
<i>SELP</i>		173610	GMP140 PSEL PADGEM CD62 GRMP CD62P
<i>SEM1</i>	NM_001393898:3 NM_001393899:3 NM_001393900:3 NM_001393901:3 NM_001393902:3 NM_001393903:3 NM_001393904:2-3 NM_001393905:2	601285	PSMD15 DSS1 Shfdg1 C7orf76 ECD SHFD1 SHFM1 SHSF1 FLJ42280
<i>SEMA3A</i>		603961	Hsema-I coll-1 SEMAD SEMA1 SemD
<i>SEMA3C</i>	NM_001350120:1	602645	SemE SEMAE
<i>SEMA3D</i>		609907	Sema-Z2 coll-2
<i>SEMA3E</i>		608166	M-SemaK KIAA0331 coll-5 SEMAH
<i>SEMA3F</i>		601124	SEMAK Sema4
<i>SEMA4A</i>		607292	SemB

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			SEMAB CORD10 FLJ12287
<i>SEMA5A</i>		609297	SEMAF semF
<i>SEMA7A</i>		607961	SEMAL H-Sema-L CD108
<i>SEPSECS</i>		613009	SLA-p35 SLA SecS SLA/LP
<i>SEPTIN12</i>		611562	SEPT12 FLJ25410
<i>SEPTIN9</i>		604061	SeptD1 MSF KIAA0991 MSF1 PNUTL4 AF17q25 SEPT9
<i>SERAC1</i>		614725	FLJ14917
<i>SERPINA1</i>		107400	PI alpha1AT AAT A1A PI1 A1AT alpha-1-antitrypsin
<i>SERPINA3</i>		107280	ACT AACT
<i>SERPINA6</i>		122500	CBG
<i>SERPINA7</i>		314200	TBG
<i>SERPINB4</i>		600518	PI11 SCCA-2 SCCA1 LEUPIN SCCA2
<i>SERPINB6</i>		173321	PI6 DFNB91 PTI CAP
<i>SERPINB7</i>		603357	
<i>SERPINB8</i>	NM_001348367:7	601697	PI8 CAP2
<i>SERPINC1</i>	NM_001386303:2	107300	ATIII AT3 MGC22579
<i>SERPIND1</i>		142360	HC2 D22S673

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			HC-II HCF2 HLS2
<i>SERPINE1</i>	NM_001386459:10 NM_001386460:9 NM_001386461:8 NM_001386464:9	173360	PAI1 PAI PLANH1
<i>SERPINF1</i>		172860	EPC-1 PIG35 PEDF
<i>SERPINF2</i>		613168	API ALPHA-2-PI alpha2AP A2AP AAP PLI
<i>SERPING1</i>		606860	HAE2 C1IN C1-INH C1INH C1NH HAE1
<i>SERPINH1</i>		600943	CBP2 SERPINH2 CBP1 HSP47
<i>SERPINI1</i>		602445	PI12
<i>SETBP1</i>		611060	KIAA0437 SEB
<i>SETD1A</i>		611052	SET1A KIAA0339 Set1 KMT2F
<i>SETD2</i>		612778	HYPB FLJ23184 KMT3A HIF-1 KIAA1732
<i>SETD5</i>		615743	SETD5A FLJ10707
<i>SETX</i>	NM_001351528:26	608465	AOA2 SCAR1 KIAA0625 STEX Sen1 ALS4
<i>SF3B1</i>		605590	SF3b155 SAP155 Hsh155 Prp10

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			PRPF10
<i>SF3B4</i>		605593	Hsh49 SF3b49 SAP49
<i>SFRP4</i>		606570	frpHE FRP-4 FRZB-2 FRPHE
<i>SFTPA1</i>	NM_005411:6 NM_001093770:6 NM_001164644:6 NM_001164645:6 NM_001164646:6 NM_001164647:5	178630	COLEC4 SP-A SFTP1 SP-A1
<i>SFTPA2</i>	NM_001098668:6 NM_001320813:6 NM_001320814:5	178642	COLEC5 SP-A2
<i>SFTP3</i>	NM_001367281:9	178640	SFTP3 SP-B
<i>SFTPC</i>		178620	SMDP2 PSP-C SP-C SFTP2 BRICD6
<i>SFXN4</i>		615564	SLC56A4
<i>SGCA</i>		600119	SCARMD1 A2 DMDA2 ADL LGMD2D adhalin
<i>SGCB</i>		600900	A3b SGC LGMD2E
<i>SGCD</i>		601411	LGMD2F CMD1L DAGD
<i>SGCE</i>	NM_001099401:10	604149	DYT11
<i>SGCG</i>	NM_001378244:1	608896	SCG3 DMDA A4 DMDA1 MGC130048 DAGA4 MAM TYPE LGMD2C SCARMD2
<i>SGO1</i>		609168	SGOL1 NY-BR-85

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>SGPL1</i>		603729	SPL
<i>SGSH</i>	NM_001352921:8 NM_001352922:8	605270	SFMD MPS3A HSS
<i>SGSM3</i>	NM_001350040:22 NM_001350041:22 NM_001350047:21	610440	RABGAP5 DJ1042K10.2 RabGAP-5 RUTBC3 RUSC3
<i>SH2B1</i>		608937	FLJ30542 SH2B
<i>SH2B3</i>		605093	IDDM20 LNK
<i>SH2D1A</i>		300490	IMD5 DSHP XLP XLPD SAP MTCP1 LYP EBVS
<i>SH3BP2</i>	NM_001145856:1	602104	CRBM RES4-23
<i>SH3GL1</i>		601768	SH3D2B CNSA1 MGC111371 EEN SH3P8
<i>SH3PXD2B</i>		613293	FLJ20831 KIAA1295
<i>SH3TC2</i>		608206	KIAA1985 CMT4C
<i>SHANK1</i>		604999	SSTRIP SPANK-1 synamon
<i>SHANK2</i>	NM_001379226:1	603290	SHANK ProSAP1 SPANK-3 CTTNBP1 CORTBP1
<i>SHANK3</i>	NM_001372044:2	606230	prosap2 KIAA1650 PSAP2 SPANK-2
<i>SHBG</i>		182205	MGC138391 MGC126834 TEBG ABP
<i>SHC1</i>		600560	SHC ShcA

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			p66
<i>SHC3</i>		605263	SHCC N-Shc NSHC
<i>SHH</i>		600725	MCOPCB5 HLP3 SMMCI TPTPS HPE3 TPT HHG1
<i>SHMT1</i>		182144	CSHMT MGC15229 SHMT MGC24556
<i>SHOC2</i>		602775	SOC-2 SUR-8 SUR8 KIAA0862 SOC2
<i>SHOX</i>	NM_006883:6	312865	SHOXY PHOG GCFX SS
<i>SHOX2</i>		602504	OG12 SHOT OG12X
<i>SHPK</i>		605060	SHK CARKL
<i>SHROOM3</i>		604570	KIAA1481 APXL3 SHRM ShrmL
<i>SHROOM4</i>		300579	KIAA1202
<i>SI</i>		609845	
<i>SIAE</i>		610079	MGC87009 LSE YSG2 CSE-C
<i>SIGIRR</i>		605478	IL-1R8 TIR8
<i>SIGLEC1</i>		600751	sialoadhesin SN FLJ00051 FLJ32150 CD169 FLJ00055 SIGLEC-1 FLJ00073 dJ1009E24.1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>SIGMAR1</i>		601978	OPRS1 SR-BP1
<i>SIK1</i>		605705	SNF1LK msk
<i>SIL1</i>		608005	ULG5 MSS BAP
<i>SIM1</i>		603128	bHLHe14
<i>SIN3A</i>		607776	DKFZP434K2235 KIAA0700
<i>SIPA1L1</i>	NM_001354289:5	617504	SPAR1 KIAA0440 E6TP1
<i>SIPA1L3</i>		616655	KIAA0545 SPAR3
<i>SIRT1</i>		604479	SIR2L1
<i>SIRT3</i>		604481	SIR2L3
<i>SIX1</i>		601205	DFNA23
<i>SIX2</i>		604994	
<i>SIX3</i>		603714	HPE2
<i>SIX5</i>		600963	DMAHP
<i>SIX6</i>		606326	OPTX2 Six9
<i>SKI</i>		164780	
<i>SKIV2L</i>		600478	SKIV2 SKIV2L1 DDX13 HLP SKI2W SKI2 170A
<i>SLBP</i>		602422	HBP
<i>SLC10A1</i>		182396	NTCP
<i>SLC10A2</i>		601295	ISBT ASBT
<i>SLC11A2</i>		600523	DMT1 DCT1 NRAMP2
<i>SLC12A1</i>	NM_001384136:5	600839	NKCC2
<i>SLC12A2</i>		600840	BSC2 NKCC1 PPP1R141 BSC
<i>SLC12A3</i>		600968	NCCT
<i>SLC12A5</i>		606726	KIAA1176 KCC2
<i>SLC12A6</i>		604878	KCC3 ACCPN
<i>SLC12A9</i>	NM_001267812.1:all NM_001267814.2:all	616861	CIP1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
	NM_001363493.2:all NM_001363494.2:11 NM_020246.4:all		
<i>SLC13A5</i>		608305	INDY NACT
<i>SLC14A1</i>		613868	RACH2 JK RACH1 HsT1341
<i>SLC16A1</i>		600682	MCT MCT1
<i>SLC16A12</i>		611910	MCT12
<i>SLC16A2</i>		300095	MCT8 MCT7 AHDS MRX22 XPCT DXS128
<i>SLC17A3</i>		611034	NPT4
<i>SLC17A5</i>	NM_001382631:2 NM_001382633:11	604322	SD ISSD SLD SIASD NSD SIALIN AST
<i>SLC17A8</i>		607557	DFNA25 VGLUT3
<i>SLC17A9</i>		612107	FLJ23412 C20orf59 VNUT
<i>SLC18A2</i>		193001	SVMT VMAT2 SVAT
<i>SLC18A3</i>		600336	VACHT
<i>SLC19A1</i>		600424	RFC1 FOLT
<i>SLC19A2</i>		603941	ThT1 THTR1 TRMA
<i>SLC19A3</i>	NM_001371413:3 NM_001371414:3	606152	THTR2
<i>SLC1A1</i>		133550	EAAC1 EAAT3
<i>SLC1A2</i>		600300	GLT-1 EAAT2
<i>SLC1A3</i>		600111	EA6 GLAST EAAT1
<i>SLC1A4</i>		600229	SATT

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			ASCT1
<i>SLC20A2</i>		158378	Ram-1 PiT-2 MLVAR Glv-2 GLVR2
<i>SLC22A1</i>		602607	OCT1
<i>SLC22A12</i>		607096	OAT4L URAT1 RST
<i>SLC22A18</i>		602631	ITM TSSC5 ORCTL2 BWSCR1A BWR1A IMPT1 SLC22A1L
<i>SLC22A3</i>		604842	OCT3 EMT
<i>SLC22A4</i>		604190	OCTN1 DFNB60 MGC34546
<i>SLC22A5</i>		603377	CDSP SCD OCTN2
<i>SLC24A1</i>		603617	KIAA0702 NCKX HsT17412 CSNB1D RODX NCKX1
<i>SLC24A2</i>		609838	NCKX2
<i>SLC24A4</i>		609840	NCKX4
<i>SLC24A5</i>		609802	JSX OCA6
<i>SLC25A1</i>		190315	SLC20A3 CTP
<i>SLC25A10</i>		606794	DIC
<i>SLC25A12</i>		603667	Aralar
<i>SLC25A13</i>		603859	CTLN2 ARALAR2 CITRIN
<i>SLC25A15</i>		603861	ORNT1 ORC1 HHH D13S327
<i>SLC25A19</i>		606521	MCPHA TPC MUP1 DNC

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
SLC25A20		613698	CACT CAC
SLC25A22		609302	FLJ13044 GC1 NET44 EIEE3
SLC25A26	NM_001400705:10 NM_001400709:9	611037	
SLC25A3		600370	PHC
SLC25A32		138480	MFTC
SLC25A35	NM_001320870.2:all NM_001320871:1-4,6 NM_001320872:1-4,6 NM_001320877.1:all NM_201520:1-4,6	610818	FLJ40217
SLC25A38		610819	FLJ20551
SLC25A4		103220	PEO2 PEO3 ANT1 T1
SLC25A40		610821	MCFP
SLC25A42		610823	MGC26694
SLC25A46		610826	
SLC26A1		610130	SAT-1 EDM4
SLC26A2		606718	DTD DTDST
SLC26A3		126650	CLD DRA
SLC26A4		605646	PDS DFNB4
SLC26A5		604943	DFNB61 PRES
SLC26A8		608480	
SLC27A4		604194	ACSVL4 FATP4
SLC27A5		603314	FACVL3 FATP5 ACSVL6 FLJ22987 ACSB VLC SH2 VLCS-H2 VLACSR
SLC28A1		606207	CNT1
SLC28A3		608269	CNT3
SLC29A1		602193	ENT1
SLC29A2		602110	HNP36 ENT2 DER12

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>SLC29A3</i>		612373	FLJ11160 ENT3
<i>SLC29A4</i>		609149	ENT4 FLJ34923
<i>SLC2A1</i>		138140	GLUT1 CSE HTLVR GLUT-1 DYT9 GLUT DYT18
<i>SLC2A10</i>		606145	GLUT10
<i>SLC2A2</i>		138160	GLUT2
<i>SLC2A4</i>		138190	GLUT4
<i>SLC2A9</i>		606142	URATv1 GLUTX Glut9
<i>SLC30A10</i>	NM_001376929:1	611146	ZnT-10 ZRC1 DKFZp547M236 ZNT8
<i>SLC30A2</i>		609617	ZNT2
<i>SLC30A3</i>		602878	ZNT3
<i>SLC31A1</i>		603085	CTR1 COPT1 hCTR1
<i>SLC33A1</i>		603690	ACATN AT-1 AT1 SPG42
<i>SLC34A1</i>		182309	NPTIIa SLC11 NPT2 NAPI-3 SLC17A2
<i>SLC34A2</i>		604217	NAPI-3B
<i>SLC34A3</i>		609826	NPTIIc FLJ38680
<i>SLC35A1</i>		605634	hCST CMPST
<i>SLC35A2</i>		314375	UGAT UGALT UGT UGT2 UGT1 UGTL
<i>SLC35A3</i>		605632	
<i>SLC35C1</i>		605881	FUCT1 FLJ11320
<i>SLC35D1</i>		610804	UGTREL7

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			KIAA0260
<i>SLC35D3</i>		612519	FRCL1
<i>SLC36A2</i>		608331	tramdorin TRAMD1 PAT2
<i>SLC37A4</i>		602671	G6PT3 G6PT1 GSD1c GSD1d G6PT2 GSD1b
<i>SLC38A8</i>		615585	
<i>SLC39A13</i>		608735	FLJ25785
<i>SLC39A14</i>	NM_001351657:3 NM_001351658:2 NM_001351659:1	608736	ZIP14 NET34 KIAA0062
<i>SLC39A4</i>		607059	AWMS2 ZIP4 AEZ
<i>SLC39A5</i>		608730	
<i>SLC39A8</i>	NM_001135148:1	608732	BIGM103
<i>SLC3A1</i>		104614	CSNU1 NBAT RBAT ATR1 D2H
<i>SLC40A1</i>		604653	IREG1 MTP1 SLC11A3 HFE4 FPN1
<i>SLC41A1</i>		610801	MgtE
<i>SLC41A2</i>	NM_001387128:11 NM_001387129:11 NM_001387130:11	610802	DKFZP434K0427
<i>SLC41A3</i>		610803	FLJ20473
<i>SLC45A2</i>		606202	OCA4 AIM-1 MATP
<i>SLC46A1</i>		611672	PCFT MGC9564 HCP1
<i>SLC47A2</i>		609833	FLJ31196 MATE2 MATE2-K
<i>SLC4A1</i>		109270	WR FR AE1 DI WD

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			CD233 SW EPB3 RTA1A
<i>SLC4A10</i>	NM_001354440:26 NM_001354443:2,26 NM_001354445:26 NM_001354446:25 NM_001354447:3 NM_001354460:2 NM_001354461:3	605556	NCBE NBCn2
<i>SLC4A11</i>		610206	CHED2 CDPD1 FECD4 NaBC1 BTR1 dJ794I6.2
<i>SLC4A4</i>		603345	hhNMC NBC2 SLC4A5 pNBC HNBC1 NBC1
<i>SLC52A1</i>		607883	RFVT1 hRFT1 GPR172B GPCR42 PAR2 FLJ10060
<i>SLC52A2</i>		607882	FLJ11856 hRFT3 GPCR41 RFVT2 D15Ert747e PAR1 GPR172A
<i>SLC52A3</i>		613350	C20orf54 bA371L19.1 RFVT3 hRFT2
<i>SLC5A1</i>		182380	D22S675 NAGT SGLT1
<i>SLC5A2</i>		182381	SGLT2
<i>SLC5A5</i>		601843	NIS
<i>SLC5A7</i>		608761	hCHT CHT1
<i>SLC6A1</i>		137165	GABATHG GABATR GAT1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>SLC6A11</i>		607952	GAT3
<i>SLC6A12</i>		603080	BGT-1
<i>SLC6A13</i>		615097	GAT2
<i>SLC6A17</i>		610299	
<i>SLC6A19</i>		608893	
<i>SLC6A2</i>		163970	NET1 NAT1 SLC6A5 NET
<i>SLC6A20</i>		605616	Xtrp3 IMINO SIT1 XT3
<i>SLC6A3</i>		126455	DAT DAT1
<i>SLC6A4</i>		182138	5-HTT OCD1 HTT SERT1
<i>SLC6A5</i>		604159	NET1 GLYT2
<i>SLC6A8</i>		300036	CRTR CT1
<i>SLC6A9</i>		601019	GLYT1
<i>SLC7A14</i>		615720	PPP1R142 KIAA1613
<i>SLC7A2</i>		601872	ATRC2 HCA2 CAT-2
<i>SLC7A3</i>		300443	FLJ14541 ATRC3 CAT-3
<i>SLC7A7</i>		603593	y+LAT-1 LPI
<i>SLC7A9</i>		604144	CSNU3
<i>SLC9A1</i>		107310	PPP1R143 APNH NHE1
<i>SLC9A3</i>		182307	NHE3
<i>SLC9A3R1</i>		604990	NHERF1 NHERF EBP50
<i>SLC9A6</i>	NM_001379110:14	300231	NHE6 KIAA0267
<i>SLC9A9</i>		608396	NHE9 FLJ35613
<i>SLC9B1</i>	NM_139173.4:all NM_001100874:2-11	611527	NHA1 NHEDC1
<i>SLC01B1</i>		604843	OATP-C LST-1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			SLC21A6 OATP1B1
<i>SLC01B3</i>		605495	SLC21A8 OATP1B3 OATP8
<i>SLC01B3-SLC01B7</i>	NM_001371097:14-16		OATP1B3-1B7 LST-3TM12
<i>SLC02A1</i>		601460	SLC21A2 PGT OATP2A1 MATR1
<i>SLC03A1</i>		612435	SLC21A11 OATP3A1 OATP-D
<i>SLFN14</i>		614958	
<i>SLIT2</i>		603746	SLIL3 Slit-2
<i>SLITRK1</i>		609678	LRRC12 KIAA1910
<i>SLITRK5</i>		609680	LRRC11 bA364G4.2 KIAA0918
<i>SLITRK6</i>		609681	FLJ22774
<i>SLMAP</i>	NM_001377538:13 NM_001377539:13 NM_001377540:13 NM_001377542:12 NM_001377545:13 NM_001377555:13 NM_001377921:12 NM_001377922:13	602701	KIAA1601 SLAP
<i>SLURP1</i>		606119	LY6LS ArsB ARS ANUP LY6-MT MDM
<i>SLX4</i>		613278	KIAA1987 KIAA1784 FANCP BTBD12
<i>SMAD1</i>		601595	JV4-1 MADH1 MADR1
<i>SMAD2</i>		601366	MADR2 JV18-1 MADH2
<i>SMAD3</i>		603109	MADH3 HsT17436 JV15-2

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>SMAD4</i>		600993	DPC4 MADH4
<i>SMAD6</i>		602931	MADH6 HsT17432 MADH7
<i>SMAD9</i>		603295	MADH6 MADH9 SMAD8/9 SMAD8
<i>SMARCA2</i>		600014	SNF2 hBRM BAF190 SWI2 Sth1p SNF2L2 hSNF2a BRM SNF2LA
<i>SMARCA4</i>		603254	SNF2 SWI2 BAF190 FLJ39786 hSNF2b SNF2-BETA SNF2L4 SNF2LB BRG1
<i>SMARCA1</i>		612761	ETL1 DKFZp762K2015 DKFZP762K2015 KIAA1122
<i>SMARCA1</i>		606622	HHARP HARP
<i>SMARCB1</i>		601607	BAF47 SNF5 hSNFS Sfh1p INI-1 SNF5L1 Snr1 Ini1 RDT PPP1R144
<i>SMARCE1</i>		603111	BAF57
<i>SMC1A</i>		300040	SMC1L1 DXS423E Smcb KIAA0178 SB1.8
<i>SMC3</i>		606062	BAM HCAP

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			SMC3L1 CSPG6 bamacan
<i>SMCHD1</i>		614982	KIAA0650 FSHD2
<i>SMG1</i>	NM_015092:3,6,8,11,21-22,27	607032	LIP KIAA0421 ATX
<i>SMG5</i>		610962	KIAA1089 LPTSRP1 EST1B RP11-54H19.7 SMG-5 LPTS-RP1
<i>SMG6</i>		610963	EST1A C17orf31 KIAA0732 SMG-6
<i>SMG7</i>	NM_001394144:4	610964	KIAA0250 C1orf16 SGA56M EST1C SMG-7
<i>SMG8</i>		613175	FLJ10587 C17orf71 FLJ23205
<i>SMG9</i>		613176	C19orf61 FLJ12886
<i>SMIM27</i>	NM_001349118:3 NM_001349119:3 NM_001387564:2		TOPORS-AS1 C9orf133
<i>SMO</i>		601500	SMOH FZD11
<i>SMOC1</i>		608488	
<i>SMOC2</i>		607223	SMAP2
<i>SMPD1</i>		607608	ASM
<i>SMPX</i>		300226	DFN6 Chisel Csl DFNX4
<i>SMS</i>		300105	SRS MRSR SpS SPMSY
<i>SNAI2</i>		602150	SLUGH SLUG SNAIL2 SLUGH1
<i>SNAP25</i>		600322	SNAP bA416N4.2

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			SEC9 dJ1068F16.2 RIC-4 RIC4 SNAP-25
SNAP29		604202	SNAP-29 CEDNIK
SNCA	NM_001375290:1	163890	PARK1 PARK4 PD1 NACP
SNCAIP		603779	SYPH1
SNCB		602569	
SNIP1		608241	PML1
SNRNP200		601664	ASCC3L1 BRR2 RP33 KIAA0788 U5-200KD HELIC2
SNRPB		182282	snRNP-B SNRPB1 COD SmB/SmB' Sm-B/B'
SNRPE		128260	Sm-E
SNRPN	NM_001378251:8 NM_001378252:5 NM_001378253:4 NM_001378254:6 NM_001378255:4	182279	SMN RT-LI SNRNP-N HCERN3 SNURF-SNRPN SM-D PWCR
SNTA1		601017	SNT1 LQT12 TACIP1
SNX10		614780	
SNX14	NM_001350532:2	616105	RGS-PX2
SNX27		611541	MY014 MGC20471 KIAA0488
SOBP		613667	FLJ10159
SOCS3		604176	SSI-3 SOCS-3 CIS3 Cish3
SOCS4		616337	SOCS7
SOCS6		605118	STAI4 CIS4 SOCS4

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			HSPC060 Cish4 SSI4 STATI4
<i>SOD1</i>		147450	IPOA ALS1 ALS
<i>SOD2</i>		147460	GCLnc1 IPOB MnSOD
<i>SOD3</i>		185490	EC-SOD
<i>SOHLH1</i>		610224	SPATA27 TEB2 C9orf157 NOHLH bHLHe80 bA100C15.3
<i>SOHLH2</i>		616066	SPATA28 bHLHe81 FLJ20449 TEB1
<i>SON</i>		182465	C21orf50 DBP-5 FLJ21099 FLJ33914 KIAA1019 BASS1 NREBP
<i>SORL1</i>		602005	LR11 SorLA-1 SorLA LRP9 gp250 C11orf32
<i>SORT1</i>		602458	Gp95 NT3
<i>SOS1</i>	NM_001382394:1	182530	GF1 HGF GINGF
<i>SOS2</i>		601247	
<i>SOST</i>		605740	VBCH DAND6
<i>SOX10</i>		602229	WS4 SOX-10 WS2E DOM
<i>SOX11</i>		600898	
<i>SOX17</i>		610928	
<i>SOX18</i>		601618	
<i>SOX2</i>		184429	

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>SOX3</i>		313430	PHP
<i>SOX5</i>		604975	MGC35153 L-SOX5
<i>SOX6</i>		607257	
<i>SOX9</i>		608160	SRA1 CMD1 CMPD1
<i>SP110</i>	NM_001378442:18 NM_001378443:17	604457	IFI75 IFI41
<i>SP7</i>		606633	osterix OSX
<i>SPACA6</i>		618945	LINC00085 SPACA6P LET7EH NCRNA00085
<i>SPAG1</i>		603395	FLJ32920 TPIS CILD28 DNAAF13 CT140 HSD-3.8 SP75
<i>SPAG8</i>	NM_172312:1-6,8 NM_001039592.2:all NM_001366760.2:all	605731	CT142 HSD-1 BS-84 SPAG3 hSMP-1
<i>SPARC</i>		182120	BM-40 ON ONT
<i>SPART</i>		607111	TAHCCP1 SPG20 KIAA0610
<i>SPAST</i>		604277	FSP2 ADPSP SPG4 KIAA1083
<i>SPATA16</i>		609856	NYD-SP12
<i>SPATA5</i>		613940	SPAF AFG2
<i>SPATA7</i>		609868	HSD3 LCA3
<i>SPDL1</i>		616401	hSpindly FLJ20364 CCDC99
<i>SPECC1L</i>		614140	KIAA0376 CYTSA
<i>SPEG</i>		615950	SPEGalpha SPEGbeta MGC12676

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			APEG1 BPEG MYLK6 KIAA1297
<i>SPG11</i>		610844	ALS5 KIAA1840 FLJ21439
<i>SPG21</i>		608181	ACP33 BM-019 ABHD21 MAST GL010
<i>SPG7</i>	NM_001363850:17	602783	CAR SPG5C CMAR
<i>SPINK1</i>		167790	PCTT Spink3 TATI PSTI
<i>SPINK5</i>		605010	NS FLJ21544 FLJ97596 FLJ99794 LEKTI LETKI DKFZp686K19184 NETS VAKTI FLJ97536
<i>SPINT2</i>		605124	HAI-2 Kop HAI2
<i>SPOCK1</i>		602264	SPOCK testican-1 TIC1
<i>SPOP</i>		602650	TEF2 BTBD32
<i>SPP1</i>		166490	OPN BSPI BNSP ETA-1
<i>SPP2</i>		602637	SPP24
<i>SPR</i>		182125	SDR38C1
<i>SPRED1</i>		609291	PPP1R147 FLJ33903
<i>SPRED2</i>		609292	Spred-2 FLJ31917 FLJ21897
<i>SPRED3</i>		609293	
<i>SPRTN</i>		616086	DVC1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			Spartan DKFZP547N043 C1orf124
<i>SPRY2</i>		602466	hSPRY2
<i>SPRY4</i>		607984	
<i>SPTA1</i>		182860	EL2
<i>SPTAN1</i>	NM_001363759:52 NM_001375310:50 NM_001375312:2 NM_001375318:2,53	182810	
<i>SPTB</i>		182870	
<i>SPTBN2</i>		604985	SCA5
<i>SPTBN4</i>	NM_020971:2-11,13-36 NM_025213.3:all	606214	KIAA1642 SPTBN3
<i>SPTBN5</i>		605916	HUBSPECV HUSPECV BSPECV
<i>SPTLC1</i>	NM_006415:3 NM_001281303:3 NM_001368272:6 NM_178324:3	605712	LCB1 HSN1 HSAN1 SPTI hLCB1
<i>SPTLC2</i>		605713	hLCB2a KIAA0526 LCB2A LCB2
<i>SPTLC3</i>		611120	FLJ11112 SPTLC2L C20orf38 hLCB2b LCB2B
<i>SQSTM1</i>		601530	p62 A170 p60 PDB3 p62B OSIL
<i>SRA1</i>		603819	SRA STRAA1
<i>SRC</i>		190090	c-src SRC1 ASV
<i>SRCAP</i>		611421	KIAA0309 SWR1 DOMO1
<i>SRD5A2</i>		607306	
<i>SRD5A3</i>		611715	FLJ13352 SRD5A2L SRD5A2L1
<i>SREBF1</i>	NM_001388387:8	184756	bHLHd1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			SREBP1 SREBP-1c SREBP1a
<i>SREBF2</i>		600481	bHLHd2 SREBP2
<i>SRGAP1</i>		606523	KIAA1304 ARHGAP13
<i>SRGAP3</i>		606525	SRGAP2 MEGAP ARHGAP14 KIAA0411 WRP
<i>SRI</i>		182520	
<i>SRP68</i>		604858	
<i>SRP72</i>		602122	
<i>SRPK2</i>	NM_001350739:14 NM_001350740:1 NM_001350741:16 NM_001350742:1 NM_001350743:17 NM_001350744:15 NM_001350746:1	602980	SFRSK2
<i>SRPK3</i>		301002	MSSK1 STK23
<i>SRPX2</i>		300642	SRPUL
<i>SRRM2</i>		606032	KIAA0324 SRm300 Cwc21 SRL300
<i>SRY</i>		480000	TDF
<i>SS18L1</i>		606472	CREST KIAA0693 SMARCL2
<i>SSH1</i>		606778	KIAA1298 SSH1L
<i>SSR4</i>		300090	TRAPD
<i>SSTR5</i>		182455	
<i>SSX1</i>		312820	CT5.1
<i>ST14</i>		606797	TMPRSS14 CAP3 MT-SP1 HAI SNC19 PRSS14
<i>ST20-MTHFS</i>	NM_001199760:2		
<i>ST3GAL3</i>	NM_001350619:12 NM_001350620:12 NM_001350621:6,13	606494	SIAT6 MRT12
<i>ST3GAL5</i>		604402	ST3GalV SIAT9

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			SIATGM3S
<i>ST6GALNAC5</i>		610134	SIAT7E MGC3184 ST6GalNAcV
<i>ST7</i>	NM_001369599:1 NM_001369600:1 NM_001369602:1 NM_001369603:1 NM_001369606:2 NM_001369607:2	600833	ETS7q FAM4A1 FAM4A RAY1 HELG TSG7 SEN4
<i>STAC3</i>		615521	MGC2793
<i>STAG1</i>		604358	SA-1 SA1 SCC3A
<i>STAG3</i>	NM_012447:10 NM_001282716:10 NM_001282717:10 NM_001282718:8 NM_001375438:10	608489	
<i>STAMBP</i>	NM_001353969:10 NM_001353970:11 NM_001353976:10	606247	AMSH
<i>STAP1</i>		604298	BRDG1 STAP-1
<i>STAR</i>		600617	STARD1
<i>STAT1</i>	NM_001384881:3 NM_001384884:3	600555	STAT91 ISGF-3
<i>STAT2</i>		600556	STAT113
<i>STAT3</i>		102582	APRF
<i>STAT4</i>		600558	
<i>STAT5B</i>	NM_012448:6-8	604260	
<i>STEAP3</i>		609671	TSAP6 STMP3 dudlin-2
<i>STH</i>		607067	MAPTIT
<i>STIL</i>		181590	MCPH7 SIL
<i>STIM1</i>	NM_001382567:11 NM_001382572:8 NM_001382574:8	605921	GOK D11S4896E
<i>STING1</i>		612374	MITA MPYS FLJ38577 STING TMEM173 NET23 ERIS
<i>STK11</i>		602216	PJS LKB1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>STK4</i>	NM_001352385:11	604965	KRS2 YSK3 MST1
<i>STN1</i>		613128	bA541N10.2 FLJ22559 OBFC1
<i>STOX1</i>	NM_152709:1 NM_001130159:1 NM_001130160:1 NM_001130161:1	609397	FLJ25162 C10orf24
<i>STRA6</i>		610745	FLJ12541
<i>STRADA</i>		608626	Stlk LYK5 STRAD NY-BR-96
<i>STRADB</i>		607333	ALS2CR2 ILPIP PAPK CALS-21 ILPIPA
<i>STS</i>		300747	ARSC ARSC1
<i>STT3A</i>		601134	STT3-A MGC9042 ITM1 TMC
<i>STT3B</i>		608605	FLJ90106 SIMP STT3-B
<i>STUB1</i>		607207	HSPABP2 SDCCAG7 CHIP UBOX1 NY-CO-7
<i>STX11</i>		605014	
<i>STX16</i>		603666	SYN-16 SYN16 hsyn16
<i>STX1A</i>		186590	HPC-1 STX1 p35-1
<i>STX1B</i>		601485	STX1B1 STX1B2
<i>STX3</i>		600876	STX3A
<i>STX6</i>		603944	
<i>STX7</i>		603217	
<i>STXBP1</i>	NM_001374313:19 NM_001374314:19	602926	MUNC18-1 nSec1 rbSec1 UNC18

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			hUNC18
<i>STXBP2</i>		601717	MUNC18-2 Unc18-2 UNC18B Hunc18b
<i>STXBP5L</i>		609381	LLGL4 tomosyn-2 KIAA1006
<i>STYXL1</i>		616695	MK-STYX DUSP24
<i>SUCLA2</i>		603921	LINC00444
<i>SUCLG1</i>		611224	
<i>SUCLG2</i>		603922	
<i>SUCO</i>		619434	OPT C1orf9 SLP1 CH1
<i>SUFU</i>		607035	SUFUXL PRO1280 SUFUH
<i>SUGCT</i>		609187	C7orf10 ORF19 DERP13 FLJ11808
<i>SULF1</i>		610012	SULF-1 hSulf-1 KIAA1077
<i>SUMF1</i>		607939	UNQ3037 FGE
<i>SUMO1</i>	NM_001371394:5	601912	SUMO-1 OFC10 GMP1 PIC1 SMT3H3 SMT3C UBL1
<i>SUN1</i>	NM_001367635:7 NM_001367636:6-8 NM_001367637:4 NM_001367638:7 NM_001367639:5 NM_001367640:7-8 NM_001367641:7-8 NM_001367642:7 NM_001367643:7-8 NM_001367644:6 NM_001367645:6,13 NM_001367646:6-7 NM_001367647:6-7 NM_001367648:6	607723	FLJ12407 KIAA0810 UNC84A

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
	NM_001367649:6-7		
	NM_001367651:2,7-8		
	NM_001367655:6-8		
	NM_001367658:6		
	NM_001367664:7		
	NM_001367666:6-8		
	NM_001367667:6		
	NM_001367668:6-7		
	NM_001367673:6-7		
	NM_001367674:7		
	NM_001367675:7-8		
	NM_001367676:7-8		
	NM_001367677:7-8		
	NM_001367678:7-9		
	NM_001367679:6		
	NM_001367680:6		
	NM_001367681:6		
	NM_001367682:7-8		
	NM_001367683:7		
	NM_001367684:6-7		
	NM_001367685:7		
	NM_001367686:6		
	NM_001367687:7-9,17		
	NM_001367688:7		
	NM_001367689:6		
	NM_001367690:7-9		
	NM_001367691:6-8		
	NM_001367692:7-8		
	NM_001367693:7-8		
	NM_001367695:6		
	NM_001367696:7		
	NM_001367697:7-8		
	NM_001367698:7-8		
	NM_001367699:7-9		
	NM_001367700:7-8		
	NM_001367701:6		
	NM_001367702:7		
	NM_001367703:7-9		
	NM_001367704:7		
	NM_001367705:7-9		
	NM_001367706:6-7		
<i>SUN2</i>	NM_001394427:8	613569	UNC84B
<i>SUN5</i>		613942	dJ726C3.1 SPAG4L TSARG4
<i>SUOX</i>		606887	
<i>SUPT16H</i>		605012	CDC68 FLJ10857 SPT16/CDC68 FACTP140 FLJ14010

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			FACT
<i>SUPT5H</i>		602102	SPT5 SPT5H FLJ34157
<i>SURF1</i>		185620	SHY1
<i>SV2A</i>		185860	KIAA0736 SV2
<i>SYCE1</i>		611486	bA108K14.6 C10orf94 CT76
<i>SYCP3</i>		604759	
<i>SYN1</i>		313440	MRX50
<i>SYN2</i>	NM_133625:1-2 NM_003178:1-2	600755	SYNII SYNIIb SYNIIa
<i>SYN3</i>		602705	
<i>SYNCRIP</i>		616686	hnRNP-Q dJ3J17.2 HNRNPQ HNRNPQ1 GRY-RBP NSAP1
<i>SYNE1</i>	NM_001347702:1	608441	MYNE1 Nesp1 ARCA1 Nesprin-1 SCAR8 C6orf98 8B KIAA0796 dJ45H2.2 enaptin CPG2 SYNE-1B
<i>SYNE2</i>		608442	KIAA1011 NUA SYNE-2 DKFZP434H2235 NUANCE Nesprin-2 Nesp2
<i>SYNE4</i>		615535	FLJ36445 C19orf46 DFNB76 Nesp4 Nesprin-4
<i>SYNGAP1</i>		603384	SYNGAP KIAA1938 RASA5
<i>SYNGR1</i>		603925	

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>SYNJ1</i>		604297	PARK20 INPP5G
<i>SYNP0</i>		608155	KIAA1029
<i>SYP</i>		313475	MRX96
<i>SYT1</i>		185605	SVP65 P65 SYT
<i>SYT14</i>	NM_001146261:3 NM_001146264:3 NM_001397544:4 NM_001397545:5	610949	sytXIV FLJ34198
<i>SYT2</i>		600104	
<i>SZT2</i>	NM_001365999:22	615463	C1orf84 KIAA0467 SZT2B RP11-506B15.1 FLJ10387 KICS1 SZT2A FLJ34502
<i>TAB2</i>		605101	MAP3K7IP2 KIAA0733
<i>TAC3</i>		162330	NK3 ZNEUROK1 NKNB LncZBTB39-1:2 LncZBTB39 NKB
<i>TACC2</i>		605302	ECTACC AZU-1
<i>TACO1</i>		612958	CCDC44
<i>TACR3</i>		162332	NKR TAC3R NK3R
<i>TACSTD2</i>		137290	TROP2 GA733-1 M1S1 EGP-1
<i>TADA2A</i>		602276	hADA2 TADA2L ADA2 ADA2A
<i>TAF1</i>		313650	BA2R CCG1 CCGS DYT3 KAT4 TAFII250 NSCL2 DYT3/TAF1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			TAF2A
<i>TAF15</i>		601574	Npl3 RBP56 hTAFII68 TAF2N
<i>TAF2</i>		604912	TAFII150 TAF2B CIF150
<i>TAF4B</i>		601689	TAF2C2 TAFII105
<i>TAF6</i>	NM_001365004:2	602955	TAFII70 TAF2E TAFII85 MGC:8964 TAFII80
<i>TAFAZZIN</i>		300394	EFE2 G4.5 TAZ TAZ1 BTHS EFE CMD3A
<i>TAL1</i>		187040	TCL5 bHLHa17 SCL
<i>TAL2</i>		186855	bHLHa19
<i>TALD01</i>		602063	
<i>TANC1</i>		611397	KIAA1728 ROLSB
<i>TANC2</i>	NM_001394998:5,24	615047	DKFZP564D166 KIAA1148 FLJ11824 rols ROLSA FLJ10215 KIAA1636
<i>TANGO2</i>		616830	C22orf25 DKFZp761P1121
<i>TAP1</i>		170260	RING4 PSF1 ABCB2 D6S114E
<i>TAP2</i>		170261	D6S217E RING11 PSF2 ABCB3
<i>TAPBP</i>		601962	TAPA
<i>TAPT1</i>		612758	FLJ90013
<i>TARDBP</i>		605078	TDP-43 ALS10

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>TARS2</i>		612805	FLJ12528 TARSL1
<i>TAS2R16</i>		604867	T2R16
<i>TAS2R38</i>		607751	PTC T2R61
<i>TAT</i>		613018	
<i>TAX1BP3</i>		616484	TIP-1
<i>TBC1D1</i>		609850	TBC TBC1 KIAA1108
<i>TBC1D20</i>		611663	C20orf140 dJ852M4.2
<i>TBC1D24</i>		613577	DFNB86 DFNA65 TLDC6 KIAA1171
<i>TBC1D32</i>	NM_001367759:24 NM_001367760:23	615867	BROMI FLJ30899 bA57L9.1 dJ310J6.1 FLJ34235 C6orf170 C6orf171
<i>TBC1D4</i>		612465	AS160 KIAA0603 DKFZp779C0666
<i>TBC1D7</i>		612655	FLJ32666 dJ257A7.3
<i>TBCD</i>		604649	
<i>TBCE</i>		604934	pac2 KCS1 KCS HRD
<i>TBCEL-TECTA</i>	NM_001378761:2-7		
<i>TBCK</i>		616899	MGC16169 HSPC302
<i>TBK1</i>		604834	NAK
<i>TBL1X</i>		300196	TBL1 EBI
<i>TBL1XR1</i>		608628	TBLR1 DC42 IRA1 FLJ12894 C21
<i>TBP</i>		600075	TFIID TBP1 GTF2D1 SCA17
<i>TBR1</i>		604616	
<i>TBX1</i>	NM_080647:3	602054	CATCH22

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
	NM_001379200:1 NM_005992:3 NM_080646:3		VCF
<i>TBX15</i>		604127	TBX14
<i>TBX18</i>		604613	
<i>TBX19</i>		604614	dj747L4.1 TPIT
<i>TBX2</i>		600747	
<i>TBX20</i>	NM_001077653:8	606061	
<i>TBX21</i>		604895	T-bet TBLYM
<i>TBX22</i>		300307	CLPA CPX
<i>TBX3</i>		601621	TBX3-ISO UMS XHL
<i>TBX4</i>		601719	
<i>TBX5</i>		601620	HOS
<i>TBX6</i>		602427	
<i>TBXA2R</i>		188070	
<i>TBXAS1</i>	NM_001366538:5	274180	CYP5A1 CYP5 THAS TXS TS TXAS
<i>TBXT</i>		601397	T
<i>TCAP</i>		604488	T-cap CMD1N LGMD2G TELE telethonin
<i>TCF12</i>		600480	HEB bHLHb20 p64 HsT17266 HTF4
<i>TCF20</i>		603107	AR1 SPBP
<i>TCF21</i>		603306	bHLHa23 POD1
<i>TCF3</i>		147141	VDIR E47 MGC129647 E2A MGC129648 ITF1 bHLHb21 p75
<i>TCF4</i>		602272	SEF2-1B

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			bHLHb19 ITF2 E2-2
<i>TCF7L1</i>		604652	TCF3
<i>TCF7L2</i>	NM_001349870:1 NM_001349871:1	602228	TCF-4 TCF4
<i>TCIRG1</i>		604592	a3 Atp6i TIRC7 ATP6N1C ATP6V0A3 OC-116 OC116
<i>TCL1A</i>		186960	TCL1
<i>TCN1</i>		189905	TCI TC1
<i>TCN2</i>		613441	D22S750 TC2 D22S676
<i>TCOF1</i>		606847	treacle TCS
<i>TCTN1</i>	NM_001173976:2	609863	TECT1 JBTS13 FLJ21127
<i>TCTN2</i>		613846	MKS8 TECT2 C12orf38 FLJ12975 JBTS24
<i>TCTN3</i>		613847	TECT3 JBTS18 DKFZP564D116 C10orf61
<i>TDGF1</i>	NM_003212:6 NM_001174136:6	187395	CRIPTO Cripto-1 CR CR-1
<i>TDP1</i>		607198	FLJ11090 SCAN1
<i>TDP2</i>		605764	TTRAP
<i>TDRD7</i>		611258	PCTAIRE2BP
<i>TEAD1</i>		189967	TCF13 TEF-1 AA
<i>TECPR2</i>		615000	KIAA0329
<i>TECR</i>	NM_138501:13 NM_001321170:14	610057	SC2 TER MRT14 GPSN2
<i>TECRL</i>	NM_001363796:12	617242	TERL

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			DKFZp313D0829 GPSN2L DKFZp313B2333 SRD5A2L2
<i>TECTA</i>		602574	DFNB21 DFNA12 DFNA8
<i>TEK</i>		600221	TIE-2 VMCM VMCM1 TIE2 CD202b
<i>TEL02</i>		611140	KIAA0683 hCLK2 TEL2
<i>TENM1</i>		300588	ODZ3 TNM TEN-M1 TEN1 ODZ1
<i>TENM3</i>		610083	Ten-M3 KIAA1455 TEN3 ODZ3
<i>TENM4</i>		610084	ODZ4 Ten-M4 TEN4 KIAA1302
<i>TERF2IP</i>		605061	RAP1
<i>TERT</i>		187270	TP2 EST2 hEST2 TCS1 TRT
<i>TESK2</i>		604746	
<i>TET2</i>		612839	KIAA1546 FLJ20032
<i>TEX11</i>	NM_001003811:3	300311	MZIP4 TSGA3 TGC1 ZIP4 Spo22
<i>TEX15</i>	NM_001350162:3-7	605795	CT42
<i>TF</i>		190000	PRO1557 PRO2086
<i>TFAM</i>		600438	TCF6 TCF6L2
<i>TFAP2A</i>		107580	TFAP2 AP2TF AP-2alpha

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			AP-2
<i>TFAP2B</i>		601601	AP-2beta AP2-B
<i>TFCP2</i>		189889	LSF LBP-1C CP2 TFCP2C
<i>TFE3</i>		314310	bHLHe33 TFEA
<i>TFG</i>		602498	TF6 SPG57 FLJ36137
<i>TFR2</i>		604720	HFE3 TFRC2
<i>TFRC</i>		190010	TFR1 p90 CD71
<i>TG</i>		188450	AITD3 TGN
<i>TGDS</i>		616146	SDR2E1 TDPGD
<i>TGFB1</i>		190180	DPD1 TGFB TGFBeta CED
<i>TGFB2</i>		190220	
<i>TGFB3</i>		190230	ARVD ARVD1
<i>TGFB1</i>		601692	CSD3 LCD1 CSD2 CDGG1 CDB1 BIGH3 CSD1
<i>TGFB1</i>		190181	MSSE ACVRLK4 TBR-i ESS1 ALK5 TBRI ALK-5
<i>TGFB2</i>		190182	TBR-ii MFS2 TBRII
<i>TGFB3</i>		600742	betaglycan BGCAN
<i>TGIF1</i>		602630	TGIF HPE4
<i>TGM1</i>		190195	LI

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			TGASE
			LI1
			TGK
			ICR2
<i>TGM2</i>		190196	TGC
<i>TGM3</i>		600238	TGE
<i>TGM5</i>		603805	TGX
			TGMX
<i>TGM6</i>		613900	dJ734P14.3
			TGY
			SCA35
			TGM3L
<i>TH</i>		191290	DYT5b
<i>THAP1</i>		609520	FLJ10477
			DYT6
			4833431A01Rik
<i>THBD</i>		188040	BDCA-3
			CD141
			THRM
<i>THBS1</i>		188060	THBS-1
			TSP-1
			THBS
			TSP1
			TSP
<i>THG1L</i>		618802	FLJ11601
			IHG-1
			ICF45
			hTHG1
			FLJ20546
<i>THOC2</i>		300395	THO2
			MRX12
			MRX35
			dJ506G2.1
			CXorf3
<i>THOC6</i>		615403	WDR58
			MGC2655
			fSAP35
<i>THPO</i>		600044	TPO
			MGDF
			MPLLG
<i>THRA</i>		190120	NR1A1
			ERBA
			THRA1
			TRalpha
			THRA3
			AR7
			ERBA1
			EAR-7.1/EAR-7.2
			THRA2
<i>THRB</i>		190160	PRTH

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			THRB2 THRB1 TRbeta ERBA2 THR1 NR1A2 ERBA-BETA GRTH
<i>THSD1</i>		616821	TMTSP
<i>TIA1</i>	NM_001351515:5 NM_001351520:6 NM_001351522:7	603518	TIA-1
<i>TIAM1</i>	NM_001353684:1 NM_001353685:1	600687	
<i>TICAM1</i>	NM_001385678:2	607601	TRIF TICAM-1 PRVTIRB MGC35334
<i>TIMM44</i>		605058	TIM44
<i>TIMM8A</i>		300356	DFN1 DDP MTS
<i>TIMP3</i>		188826	SFD
<i>TINF2</i>		604319	TIN2
<i>TIRAP</i>		606252	Mal wyatt
<i>TJP2</i>		607709	ZO2 DFNA51 ZO-2 X104
<i>TK2</i>		188250	SCA31
<i>TKT</i>	NM_001258028:5	606781	
<i>TLE6</i>		612399	GRG6 FLJ14009
<i>TLL1</i>		606742	
<i>TLR2</i>		603028	TIL4 CD282
<i>TLR3</i>		603029	CD283
<i>TLR4</i>		603030	TLR-4 ARMD10 hToll CD284
<i>TLR9</i>		605474	CD289
<i>TM2D3</i>		610014	FLJ22604 BLP2
<i>TM4SF20</i>		615404	TCCE518 FLJ22800
<i>TMC1</i>		606706	DFNB11 DFNA36 DFNB7

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>TMC2</i>		606707	dJ686C3.3 C20orf145
<i>TMC6</i>		605828	EVIN1 TNRC6C-AS1 LAK-4P EVER1
<i>TMC8</i>		605829	EVER2 EVIN2
<i>TMC01</i>		614123	HP10122 TMCC4
<i>TMC03</i>		617134	FLJ20623 C13orf11
<i>TMEM107</i>		616183	MGC10744 JBTS29 MKS13
<i>TMEM126A</i>		612988	OPA7 DKFZp586C1924
<i>TMEM126B</i>		615533	HT007
<i>TMEM127</i>		613403	FLJ20507 FLJ22257
<i>TMEM132D</i>		611257	PPP1R153 KIAA1944 MOLT
<i>TMEM132E</i>		616178	DFNB99
<i>TMEM135</i>		616360	FLJ22104
<i>TMEM138</i>		614459	HSPC196 JBTS16
<i>TMEM165</i>		614726	SLC64A1 TPARL TMPT27 GDT1
<i>TMEM187</i>		300059	DXS9878E ITBA1 CXorf12
<i>TMEM199</i>		616815	C17orf32 MGC45714 VMA12 VPH2
<i>TMEM216</i>		613277	HSPC244 MGC13379 JBTS2 CORS2 MKS2
<i>TMEM230</i>	NM_001009923:2	617019	C20orf30 HSPC274
<i>TMEM231</i>	NM_001077416:2-3 NM_001077418:3-4	614949	PRO1886 MKS11 ALYE870 FLJ22167 JBTS20

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>TMEM237</i>		614423	JBTS14 ALS2CR4
<i>TMEM240</i>		616101	C1orf70 SCA21
<i>TMEM259</i>		611011	MBRL C19orf6 ASBABP1 MGC4022
<i>TMEM38B</i>		611236	D4Ert89e bA219P18.1 FLJ10493 C9orf87 TRIC-B
<i>TMEM43</i>		612048	ARVD5 LUMA DKFZp586G1919 MGC3222
<i>TMEM67</i>		609884	NPHP11 MKS3 MGC26979 JBTS6
<i>TMEM70</i>		612418	FLJ20533
<i>TMEM92</i>		619604	FLJ33318
<i>TMEM98</i>		615949	DKFZP564K1964
<i>TMIE</i>		607237	DFNB6
<i>TMLHE</i>	NM_018196:7-8 NM_001184797:7	300777	BBOX2 TMLH FLJ10727 XAP130
<i>TMPO</i>		188380	LEMD4 TP LAP2
<i>TMPRSS15</i>		606635	ENTK PRSS7 MGC133046
<i>TMPRSS3</i>		605511	DFNB8 DFNB10
<i>TMPRSS4</i>		606565	CAP2 TMPRSS3 MT-SP2
<i>TMPRSS5</i>		606751	MGC148044 MGC141886
<i>TMPRSS6</i>		609862	MT2 FLJ30744
<i>TMTC3</i>		617218	SMILE FLJ90492
<i>TMX3</i>		616102	KIAA1830 FLJ20793 TXNDC10 PDIA13

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>TNC</i>		187380	TN MGC167029 HXB DFNA56
<i>TNF</i>		191160	TNFA TNFSF2 DIF TNF-alpha
<i>TNFAIP3</i>		191163	OTUD7C A20
<i>TNFRSF10B</i>		603612	TRAILR2 TRICKB KILLER TRAIL-R2 TRICK2A CD262 DR5
<i>TNFRSF11A</i>	NM_003839:1 NM_001270949:1 NM_001270950:1 NM_001270951:1 NM_001278268:1	603499	CD265 RANK PDB2 ODFR FEO TRANCE-R LOH18CR1
<i>TNFRSF11B</i>		602643	OCIF TR1 OPG
<i>TNFRSF13B</i>		604907	CD267 TACI IGAD2
<i>TNFRSF13C</i>		606269	BAFFR CD268
<i>TNFRSF1A</i>	NM_001346092:6	191190	TNF-R TNF-R-I TNF-R55 TNFR60 TNFAR CD120a TNFR1
<i>TNFRSF4</i>		600315	OX40 TXGP1L ACT35 CD134
<i>TNFRSF6B</i>		603361	TR6 DcR3 M68 DCR3
<i>TNFSF11</i>		602642	OPGL TRANCE RANKL

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			ODF CD254
<i>TNFSF12</i>		602695	TWEAK APO3L DR3LG
<i>TNFSF12-TNFSF13</i>	NM_172089:7-11		TWE-PRIL
<i>TNFSF4</i>		603594	gp34 CD252 OX-40L TXGP1
<i>TNFSF8</i>		603875	CD30LG CD153
<i>TNIK</i>		610005	KIAA0551
<i>TNK2</i>		606994	ACK p21cdc42Hs ACK1
<i>TNNC1</i>		191040	TNNC
<i>TNNI2</i>		191043	DA2B FSSV AMCD2B
<i>TNNI3</i>		191044	CMH7 CMD2A TNNC1
<i>TNNI3K</i>		613932	CARK
<i>TNNT1</i>		191041	MGC104241 ANM FLJ98147 NEM5 STNT TNTS TNT
<i>TNNT2</i>		191045	CMH2 CMPD2 CMD1D
<i>TNNT3</i>		600692	AMCD2B FSSV DA2B DKFZp779M2348
<i>TNPO3</i>	NM_001382217:4 NM_001382218:22 NM_001382223:21	610032	MTR10A LGMD1F TRN-SR2 IPO12 TRN-SR
<i>TNR</i>		601995	
<i>TNXB</i>	NM_019105:32-44 NM_001365276:32-44 NM_032470.3:all	600985	TNX TNXB1 TN-X XB HXBL TNXB2

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			TNXBS XBS
<i>TOE1</i>		613931	hCaf1z TOE-1
<i>TOMM20</i>		601848	MOM19 KIAA0016 TOM20 MAS20
<i>TOMM40</i>		608061	D19S1177E TOM40 PER-EC1 C19orf1 PEREC1
<i>TOMT</i>			COMT2
<i>TONSL</i>		604546	IKBR NFKBIL2
<i>TOP1</i>		126420	
<i>TOP2A</i>		126430	TOP2 TOP2alpha TOPIIA
<i>TOPBP1</i>		607760	TOP2BP1 Dpb11 KIAA0259
<i>TOPORS</i>		609507	LUN TP53BPL RP31
<i>TOR1A</i>		605204	DQ2 DYT1
<i>TOR1AIP1</i>		614512	FLJ13142 LAP1 LAP1B LAP1C
<i>TP53</i>		191170	p53 LFS1
<i>TP63</i>		603273	KET TP53L TP73L p63 TP53CP p73H OFC8 p53CP p40 NBP p51 SHFM4 EEC3 p73L
<i>TPH1</i>		191060	TPH TPRH

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>TPH2</i>		607478	NTPH FLJ37295
<i>TPI1</i>		190450	
<i>TPK1</i>	NM_001350881:9 NM_001350882:5 NM_001350883:4 NM_001350884:3 NM_001350895:7	606370	PP20 HTPK1
<i>TPM1</i>		191010	CMH3 C15orf13
<i>TPM2</i>		190990	AMCD1 NEM4 DA1
<i>TPM3</i>		191030	NEM1 TRK
<i>TPMT</i>		187680	
<i>TPO</i>		606765	TPX
<i>TPP1</i>		607998	SCAR7 CLN2 LPIC TPP-1
<i>TPP2</i>	NM_001367947:27	190470	TPPII
<i>TPRN</i>		613354	DFNB79 FLJ90254 C9orf75
<i>TRAF1</i>		601711	EBI6
<i>TRAF3</i>		601896	CRAF1 LAP1 CD40bp CAP-1 RNF118
<i>TRAF3IP1</i>		607380	DKFZP434F124 FAP116 MIPT3 MIP-T3 IFT54
<i>TRAF3IP2</i>		607043	C6orf6 C6orf5 CIKS DKFZP586G0522 ACT1 C6orf2 C6orf4
<i>TRAF6</i>		602355	RNF85
<i>TRAIP</i>		605958	TRIP RNF206
<i>TRAK2</i>		607334	OIP98 GRIF-1 MILT2 CALS-C

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			KIAA0549 ALS2CR3
<i>TRAP1</i>		606219	HSP90L HSP75
<i>TRAPPC11</i>		614138	gry FLJ12716 foigr C4orf41
<i>TRAPPC2</i>		300202	MIP-2A TRS20 hYP38334 SEDT SEDL ZNF547L
<i>TRAPPC9</i>	NM_001374682:3	611966	NIBP T1 KIAA1882 MRT13 TRS120 IKBKBBP
<i>TRDN</i>		603283	TRISK
<i>TREM2</i>		605086	Trem2b TREM-2 Trem2a Trem2c
<i>TREML2</i>		609715	FLJ13693 C6orf76 TLT2 dJ238023.1
<i>TREML4</i>		614664	TLT4
<i>TREX1</i>		606609	AGS1 DRN3
<i>TRHR</i>		188545	
<i>TRIB3</i>		607898	C20orf97 dJ1103G7.3 TRB3
<i>TRIM2</i>	NM_001375488:4 NM_001375489:4	614141	CMT2R RNF86 KIAA0517
<i>TRIM22</i>		606559	STAF50 GPSTAF50 RNF94
<i>TRIM32</i>		602290	BBS11 TATIP LGMD2H HT2A
<i>TRIM37</i>		605073	MUL TEF3 KIAA0898 POB1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>TRIM44</i>		612298	MC7 DIPB
<i>TRIM54</i>		606474	MURF MURF-3 RNF30
<i>TRIM55</i>		606469	RNF29 MURF-2
<i>TRIM63</i>		606131	MURF-1 SMRZ IRF RNF28
<i>TRIM69</i>		616017	RNF36 TRIMLESS Trif
<i>TRIM8</i>		606125	RNF27 GERP
<i>TRIML2</i>			FLJ25801 SPRYD6
<i>TRIO</i>	NM_007118:1	601893	ARHGEF23
<i>TRIOBP</i>		609761	Tara DFNB28 TAP68 HRIHFB2122 KIAA1662
<i>TRIP11</i>		604505	CEV14 Trip230 GMAP210 GMAP-210
<i>TRIP12</i>		604506	ULF TRIPC KIAA0045
<i>TRIP4</i>		604501	HsT17391 ZC2HC5 ASC-1
<i>TRIT1</i>		617840	FLJ20061 IPT
<i>TRMT1</i>		611669	TRM1 FLJ20244
<i>TRMT10A</i>		616013	RG9MTD2 TRM10 MGC27034
<i>TRMT10C</i>		615423	MRPP1 FLJ20432 RG9MTD1
<i>TRMT5</i>	NM_001350253:1 NM_001350254:1	611023	KIAA1393 TRM5
<i>TRMU</i>		610230	FLJ10140 MTU1 TRMT MTO2

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>TRNT1</i>		612907	CGI-47 MtCCA CCA1
<i>TRPA1</i>		604775	ANKTM1
<i>TRPC3</i>		602345	
<i>TRPC6</i>		603652	FSGS2 TRP6
<i>TRPM1</i>		603576	LTRPC1 CSNB1C MLSN1
<i>TRPM2</i>		603749	TRPC7 NUDT9L1 EREG1 KNP3 LTRPC2 NUDT9H
<i>TRPM3</i>	NM_001366141:1 NM_001366142:1,27 NM_001366143:1,26 NM_001366144:1 NM_001366146:27 NM_001366148:27 NM_001366150:25 NM_001366151:26 NM_001366152:28 NM_001366154:27	608961	KIAA1616 GON-2 LTRPC3
<i>TRPM4</i>		606936	FLJ20041
<i>TRPM6</i>		607009	FLJ22628 HSH HOMG CHAK2
<i>TRPM7</i>		605692	LTRPC7 CHAK1 TRP-PLIK
<i>TRPS1</i>		604386	GC79 LGCR
<i>TRPV3</i>		607066	VRL3
<i>TRPV4</i>		605427	TRP12 VR-OAC VROAC VRL-2 CMT2C OTRPC4
<i>TRRAP</i>	NM_001375524:33	603015	TR-AP Tra1 PAF400
<i>TSC1</i>		605284	hamartin TSC LAM KIAA0243

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>TSC2</i>		191092	tuberin LAM TSC4 PPP1R160
<i>TSEN15</i>	NM_001363643:4	608756	C1orf19
<i>TSEN2</i>	NM_001321278:12	608753	SEN2 MGC2776 SEN2L
<i>TSEN34</i>		608754	SEN34L SEN34 LENG5
<i>TSEN54</i>		608755	SEN54 SEN54L
<i>TSFM</i>		604723	EF-TS EF-Tsmt
<i>TSG101</i>		601387	VPS23 TSG10
<i>TSHB</i>		188540	
<i>TSHR</i>		603372	LGR3
<i>TSHZ1</i>		614427	TSH1 SDCCAG33 NY-CO-33
<i>TSPAN12</i>		613138	TM4SF12 NET-2
<i>TSPAN7</i>		300096	TM4SF2 TALLA-1 MRX58 DXS1692E MXS1 CD231 A15
<i>TSPEAR</i>		612920	DFNB98 C21orf29 MGC11251 TSP-EAR
<i>TSPYL1</i>		604714	TSPYL
<i>TSR2</i>		300945	RP1-112K5.2 DT1P1A10 WGG1
<i>TTBK1</i>		619415	KIAA1855
<i>TTBK2</i>		611695	SCA11 KIAA0847
<i>TTC19</i>		613814	MGC19520 FLJ20343
<i>TTC21B</i>		612014	FLJ11457 NPHP12 IFT139B FAP60 IFT139 THM1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			FLA17
			JBTS11
<i>TTC3</i>		602259	DCRR1 TPRDI RNF105 TPRDIII TPRDII TPRD
<i>TTC37</i>		614589	THES SKI3 KIAA0372
<i>TTC7A</i>		609332	TTC7 KIAA1140
<i>TTC8</i>		608132	RP51 BBS8
<i>TTI1</i>		614425	KIAA0406 smg-10
<i>TTI2</i>		614426	C8orf41 FLJ23263
<i>TTLL10</i>			TTLL5 FLJ36119
<i>TTLL5</i>		612268	KIAA0998
<i>TTN</i>	NM_133378:153-155 NM_001256850:154-156 NM_001267550:172,174-197	188840	MYLK5 FLJ32040 CMPD4 TMD LGMD2J CMD1G CMH9
<i>TTPA</i>		600415	AVED
<i>TTR</i>		176300	PALB CTS1 HsT2651 CTS
<i>TUB</i>		601197	rd5
<i>TUBA1A</i>		602529	B-ALPHA-1 FLJ25113 TUBA3
<i>TUBA3E</i>	NM_207312:2		
<i>TUBA4A</i>		191110	FLJ30169 TUBA1 H2-ALPHA
<i>TUBA8</i>		605742	TUBAL2
<i>TUBB</i>		191130	M40 Tubb5 OK/SW-cl.56 MGC16435
<i>TUBB1</i>		612901	dJ543J19.4
<i>TUBB2A</i>	NM_001069:2,4 NM_001310315.2:all	615101	dJ40E16.7 TUBB

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			TUBB2
<i>TUBB2B</i>	NM_178012:4	612850	bA506K6.1 DKFZp566F223 MGC8685
<i>TUBB3</i>		602661	CFEOM3 beta-4 FEOM3 CFEOM3A
<i>TUBB4A</i>		602662	beta-5 TUBB4 DYT4
<i>TUBB8</i>	NM_177987:4 NM_001389618:5 NM_001389619:5	616768	bA631M21.2
<i>TUBG1</i>	NM_001070:3	191135	TUBG TUBGCP1
<i>TUBGCP4</i>		609610	FLJ14797 76P
<i>TUBGCP6</i>		610053	GCP6 DJ402G11.6 KIAA1669
<i>TUFM</i>		602389	EF-TuMT EFTu EFTU
<i>TULP1</i>		602280	RP14 TUBL1 LCA15
<i>TUSC3</i>		601385	OST3A MGC13453 SLC58A2 MRT22 MagT2 MRT7 N33
<i>TWIST1</i>		601622	CRS1 CRS H-twist TWIST BPES2 BPES3 ACS3 bHLHa38 SCS
<i>TWIST2</i>		607556	Dermo-1 DERMO1 bHLHa39
<i>TWINK</i>		606075	TWINKLE C10orf2 PEO1 TWINL

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			FLJ21832 IOSCA PEO
<i>TXN2</i>		609063	MT-TRX
<i>TXNDC15</i>		617778	C5orf14 FLJ22625 2310047H23Rik
<i>TXNL4A</i>		611595	TXNL4 DIM1 DIB1 HsT161 U5-15kD SNRNP15
<i>TXNRD2</i>	NM_001352301:1 NM_001352303:1	606448	TRXR2 TR TR3 SELZ
<i>TYK2</i>	NM_001385203:19	176941	JTK1
<i>TYMP</i>		131222	MNGIE ECGF1
<i>TYMS</i>		188350	Tsase TS TMS HsT422
<i>TYMSOS</i>			C18orf56
<i>TYR</i>	NM_000372:5	606933	OCA1 OCA1A OCAIA
<i>TYROBP</i>		604142	KARAP PLO-SL PLOS DAP12
<i>TYRP1</i>		115501	CAS2 GP75 b-PROTEIN CATB TRP OCA3 TYRP
<i>UACA</i>		612516	FLJ10128 KIAA1561
<i>UBA1</i>		314370	CFAP124 UBE1 POC20 A1S9T UBE1X GXP1
<i>UBA3</i>		603172	UBE1C NAE2 hUba3

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>UBA5</i>		610552	UBE1DC1 FLJ23251
<i>UBE2A</i>		312180	HHR6A RAD6A HR6A UBC2
<i>UBE2B</i>		179095	RAD6B HHR6B UBC2
<i>UBE2T</i>		610538	HSPC150 FANCT
<i>UBE3A</i>	NM_001354523:5	601623	E6-AP AS EPVE6AP HPVE6A ANCR FLJ26981
<i>UBE3B</i>		608047	
<i>UBE3C</i>		614454	KIAA0010 KIAA10
<i>UBIAD1</i>		611632	TERE1 SCCD
<i>UBQLN2</i>		300264	CHAP1/DSK2 LIC-2 Dsk2 Chap1 RIHFB2157 PLIC-2 N4BP4 PLIC2
<i>UBR1</i>		605981	
<i>UBR4</i>		609890	ZUBR1 RBAF600 KIAA1307 p600 KIAA0462
<i>UBR5</i>		608413	DD5 EDD EDD1 KIAA0896 HYD
<i>UBR7</i>		613816	C14orf130
<i>UCHL1</i>		191342	Uch-L1 PARK5 PGP9.5 UCHL-1
<i>UCP1</i>		113730	SLC25A7 UCP
<i>UCP2</i>		601693	BMIQ4 SLC25A8

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>UCP3</i>		602044	SLC25A9
<i>UFD1</i>		601754	UFD1L
<i>UFSP2</i>		611482	C4orf20 FLJ11200
<i>UGDH</i>		603370	
<i>UGT1A1</i>		191740	UGT1 GNT1 UGT1A
<i>UGT1A10</i>	NM_019075:1	606435	UGT1J
<i>UGT1A3</i>	NM_019093:1	606428	UGT1C
<i>UGT1A4</i>		606429	UGT1D HUG-BR2
<i>UGT1A5</i>	NM_019078:1	606430	UGT1E
<i>UGT1A6</i>		606431	UGT1F GNT1 HLUGP
<i>UGT1A7</i>		606432	UGT1G
<i>UGT1A8</i>	NM_019076:1	606433	UGT1H
<i>UGT1A9</i>		606434	HLUGP4 UGT1AI LUGP4
<i>UGT2B10</i>		600070	
<i>UGT2B15</i>	NM_001076:3	600069	UGT2B8
<i>UGT2B7</i>		600068	UGT2B9
<i>ULK4</i>		617010	FAM7C1 REC01035 FLJ20574
<i>UMOD</i>	NM_001378234:7 NM_001378235:7	191845	
<i>UMPS</i>		613891	
<i>UNC119</i>		604011	POC7A HRG4 POC7
<i>UNC13A</i>		609894	KIAA1032 Munc13-1
<i>UNC13D</i>		608897	Munc13-4
<i>UNC45B</i>		611220	UNC45 CMYA4
<i>UNC5C</i>		603610	
<i>UNC80</i>	NM_001371986:27	612636	KIAA1843 UNC-80 C2orf21 FLJ33496
<i>UNC93B1</i>		608204	UNC93
<i>UNG</i>		191525	UNG2 UNG1 UDG DGU HIGM4
<i>UPB1</i>		606673	BUP1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>UPF1</i>	NM_002911:1 NM_001297549:1	601430	HUPF1 KIAA0221 NORF1 smg-2 RENT1 pNORF1
<i>UPF2</i>		605529	DKFZP434D222 smg-3 RENT2 KIAA1408
<i>UPF3A</i>	NM_023011:9-10 NM_001353644:7-8 NM_001353645:9-10 NM_001353646:7-8 NM_001353647:8-9 NM_001353648:8-9 NM_001353649:7-8 NM_001353650:9-10 NM_001353651:5 NM_001353652:6 NM_080687:8-9	605530	UPF3 HUPF3A RENT3A
<i>UPF3B</i>		300298	UPF3X HUPF3B RENT3B MRX82 UPF3BP1 UPF3BP3 MRX62 UPF3BP2
<i>UPK3A</i>		611559	UPK3
<i>UQCC2</i>		614461	bA6B20.2 M19 MNF1 Cbp6 MGC14833 C6orf125
<i>UQCC3</i>		616097	UNQ655 C11orf83
<i>UQCRB</i>		191330	QCR7 UQCR6 QP-C UQBP
<i>UQCRC2</i>		191329	QCR2 UQCR2
<i>UQCRQ</i>		612080	UQCR7 QCR8 QP-C
<i>UROC1</i>		613012	FLJ31300 HMFN0320
<i>UROD</i>		613521	

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>UROS</i>		606938	
<i>USB1</i>		613276	Mpn1 HVSL1 C16orf57 FLJ13154
<i>USF1</i>		191523	UEF MLTFI bHLHb11
<i>USH1C</i>		605242	PDZ73 harmonin AIE-75 PDZD7C NY-CO-37 DFNB18 PDZ-73 NY-CO-38
<i>USH1G</i>		607696	Sans ANKS4A FLJ33924
<i>USH2A</i>		608400	USH2 RP39
<i>USP18</i>	NM_017414:3-11	607057	
<i>USP26</i>		300309	
<i>USP27X</i>		300975	USP27
<i>USP34</i>		615295	KIAA0729 KIAA0570
<i>USP44</i>		610993	FLJ14528
<i>USP8</i>		603158	SPG59 HumORF8 KIAA0055 UBPY
<i>USP9X</i>		300072	MRX99 DFFRX FAF
<i>USP9Y</i>		400005	AZFA DFFRY
<i>UTP4</i>		607456	CIRHIN CIRH1A FLJ14728 NAIC KIAA1988 TEX292
<i>UTRN</i>	NM_001375323:1	128240	DMDL DRP DRP1
<i>UVSSA</i>		614632	KIAA1530
<i>VAC14</i>		604632	FLJ10305 ArPIKfyve TAX1BP2
<i>VAMP1</i>		185880	VAMP-1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			SYB1
VAMP2		185881	SYB2 VAMP-2
VAMP7		300053	TI-VAMP SYBL1 VAMP-7
VANGL1		610132	STB2
VANGL2		600533	LPP1 MGC119403 LTAP STBM1 STB1 MGC119404 KIAA1215 STBM
VAPB		605704	VAP-B ALS8 VAP-C
VAR1		192150	VAR2 VAR
VAR2		612802	G7a VAR2L VARSL KIAA1885 DKFZP434L1435
VAV1		164875	VAV
VAV3		605541	
VAX1		604294	
VCAN		118661	PG-M CSPG2
VCL		193065	
VCP		601023	CDC48 TERA p97 IBMPFD
VDAC1	NM_001401028:6 NM_001401027:6	604492	MGC111064 PORIN
VDR		601769	NR1I1 PPP1R163
VEGFA		192240	VPF VEGF-A VEGF
VEGFC		601528	VEGF-C VRP
VHL	NM_001354723:2	608537	VHL1
VIM		193060	
VIPAS39		613401	VPS16B VIPAR SPE39 C14orf133

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			SPE-39 hSPE-39
<i>VKORC1</i>		608547	VKCFD2
<i>VLDLR</i>		192977	CHRMQ1 VLDLRCH CARMQ1
<i>VMA21</i>	NM_001363810:1	300913	MEAX XMEA
<i>VPREB1</i>		605141	VpreB CD179A
<i>VPS11</i>		608549	PEP5 RNF108
<i>VPS13A</i>		605978	BLTP5A CHAC KIAA0986
<i>VPS13B</i>		607817	BLTP5B COH1 CHS1
<i>VPS13C</i>		608879	FLJ10381 FLJ20136 KIAA1421 BLTP5C
<i>VPS16</i>		608550	
<i>VPS33A</i>	NM_001351018:1 NM_001351019:1 NM_001351021:5	610034	
<i>VPS33B</i>		608552	FLJ14848
<i>VPS35</i>		601501	FLJ10752 PARK17 MEM3
<i>VPS37A</i>		609927	PQBP2 HCRP1 FLJ32642 SPG53
<i>VPS45</i>		610035	H1 VPS45A h-vps45 VPS45B
<i>VPS4B</i>		609983	SKD1B SKD1 VPS4-2
<i>VPS53</i>	NM_001366254:8	615850	HCCS1 FLJ10979
<i>VRK1</i>		602168	
<i>VSIG4</i>		300353	Z39IG CRlg
<i>VSX1</i>		605020	PPD PPCD1 PPCD
<i>VSX2</i>		142993	RET1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			CHX10 HOX10
<i>VTN</i>		193190	VN
<i>VWA3B</i>		614884	MGC26733 DKFZp686F2227
<i>VWF</i>	NM_000552:26,34	613160	F8VWF
<i>WAC</i>		615049	PRO1741 FLJ31290 Wwp4 MGC10753 BM-016
<i>WAS</i>		300392	THC WASPA IMD2 WASP
<i>WASHC4</i>		615748	SWIP KIAA1033
<i>WASHC5</i>		610657	KIAA0196 SPG8
<i>WBP2</i>		606962	WBP-2 GRAMD6
<i>WDPCP</i>	NM_001354044:2 NM_001354045:13	613580	CPLANE5 BBS15 hFrtz fritz C2orf86
<i>WDR1</i>		604734	AIP1
<i>WDR11</i>		606417	DR11 KIAA1351 HH14 FLJ10506 BRWD2 SRI1 WDR15
<i>WDR13</i>		300512	
<i>WDR19</i>		608151	ORF26 DYF-2 FAP66 Oseg6 KIAA1638 NPHP13 Pwtmp IFT144 FLJ23127
<i>WDR26</i>		617424	FLJ21016 GID7
<i>WDR35</i>		613602	KIAA1336 MGC33196 FAP118 IFTA1

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			IFT121
<i>WDR36</i>		609669	UTP21 TA-WDRP GLC1G
<i>WDR4</i>		605924	TRM82 TRMT82 Wuho
<i>WDR45</i>		300526	JM5 WIPI4 WDRX1 NBIA5
<i>WDR45B</i>		609226	WDR45L WIPI3
<i>WDR48</i>		612167	SPG60 P80 Bun62 KIAA1449
<i>WDR5</i>		609012	SWD3 CFAP89
<i>WDR62</i>		613583	C19orf14 FLJ33298 DKFZP434J046 MCPH2
<i>WDR72</i>	NM_001277176:1	613214	FLJ38736
<i>WDR73</i>		616144	HSPC264 FLJ14888
<i>WDR81</i>		614218	FLJ33817 CAMRQ2 SORF-2 PPP1R166
<i>WDR87</i>			NYD-SP11
<i>WDR93</i>		619891	CFAP297 FAP297 C1d-87
<i>WFS1</i>		606201	DFNA38 DIDMOAD DFNA14 DFNA6 WFS
<i>WHRN</i>		607928	USH2D CIP98 PDZD7B DFNB31
<i>WIF1</i>		605186	
<i>WIPF1</i>	NM_001375835:9	602357	WIP WASPIP
<i>WNK1</i>		605232	PPP1R167 PRKWINK1 HSN2 HSAN2

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>WNK4</i>		601844	PRKWNK4
<i>WNT1</i>		164820	INT1
<i>WNT10A</i>		606268	
<i>WNT10B</i>		601906	WNT-12 SHFM6
<i>WNT3</i>		165330	MGC138323 MGC138321 INT4 MGC131950
<i>WNT4</i>		603490	WNT-4
<i>WNT5A</i>		164975	hWNT5A
<i>WNT6</i>		604663	
<i>WNT7A</i>		601570	Wnt-7a
<i>WNT8A</i>		606360	WNT8D
<i>WNT9B</i>		602864	WNT14B WNT15
<i>WRAP53</i>		612661	FLJ10385 TCAB1 WDR79
<i>WRN</i>		604611	RECQL2 RECQ3
<i>WT1</i>		607102	WIT-2 WT-1 AWT1 GUD NPHS4 WAGR
<i>WWOX</i>		605131	WOX1 FOR SDR41C1
<i>XAF1</i>	NM_001353134:5 NM_001353137:4 NM_001353138:5	606717	BIRC4BP HSXIAPAF1 XIAPAF1
<i>XBP1</i>	NM_001393999:1 NM_001394000:1	194355	XBP2
<i>XDH</i>		607633	XOR XO
<i>XIAP</i>		300079	ILP-1 API3 hILP BIRC4
<i>XIRP1</i>		609777	Xin DKFZp451D042 CMYA1
<i>XIRP2</i>		609778	CMYA3
<i>XK</i>		314850	Kx NAC XKR1 NA X1k

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>XPA</i>	NM_001354975:1	611153	XP1 XPAC
<i>XPC</i>	NM_001354727:10	613208	RAD4 XPCC
<i>XPNPEP3</i>		613553	NPHPL1 APP3 ICP55
<i>XPO5</i>		607845	KIAA1291
<i>XPR1</i>		605237	X3 SLC53A1 SYG1
<i>XRCC1</i>		194360	RCC
<i>XRCC2</i>		600375	FANCU
<i>XRCC3</i>		600675	
<i>XRCC4</i>		194363	
<i>XYLT1</i>		608124	PXYLT1 XT-I
<i>XYLT2</i>		608125	XT-II PXYLT2
<i>YAP1</i>		606608	YAP65 YAP-1
<i>YARS1</i>		603623	YRS YARS YTS tyrRS
<i>YARS2</i>		610957	CGI-04 FLJ13995 mt-TyrRS
<i>YEATS4</i>		602116	YAF9 GAS41 NuBI-1
<i>YME1L1</i>		607472	YME1L
<i>YWHAE</i>		605066	FLJ45465
<i>YY1</i>		600013	NF-E1 DELTA UCRBP YIN-YANG-1 INO80S
<i>YY1AP1</i>	NM_001198903:9 NM_001198899:7 NM_001198900:9 NM_001198901:9 NM_001198902:9 NM_001198904:9 NM_001198905:10 NM_001198906:10 NM_018253:11 NM_139118:10 NM_139119:10 NM_139121:10	607860	YAP HCCA2 YY1AP

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>ZAP70</i>		176947	SRK ZAP-70 STD
<i>ZBTB12</i>			D6S59E C6orf46 NG35 G10
<i>ZBTB16</i>		176797	PLZF ZNF145
<i>ZBTB18</i>		608433	C2H2-171 RP58 TAZ-1 ZNF238
<i>ZBTB20</i>		606025	ZNF288 DPZF ODA-8S DKFZp566F123
<i>ZBTB24</i>		614064	BIF1 KIAA0441 PATZ2 ZNF450
<i>ZBTB25</i>	NM_001354682.2:all NM_001304507.1:all NM_001304508.2 NM_001354683.2:all NM_001354684.2:all NM_001354685.2:all NM_001354686.2:all NM_001354687.1:all NM_006977.5:all	194541	ZNF46 C14orf51 KUP
<i>ZBTB33</i>		300329	KAISO kaiso ZNF348 ZNF-kaiso WUGSC:H_DJ525N14.1
<i>ZBTB40</i>		612106	KIAA0478 ZNF923
<i>ZBTB42</i>		613915	ZNF925
<i>ZC3H14</i>		613279	UKp68 NY-REN-37 FLJ11806
<i>ZC4H2</i>		300897	WWS KIAA1166 MCS HCA127 MRXS4
<i>ZCCHC12</i>		300701	SIZN1 SIZN PNMA7A FLJ16123

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
<i>ZCCHC8</i>		616381	DKFZp434E2220
<i>ZDBF2</i>		617059	KIAA1571 FLJ45338
<i>ZDHC15</i>		300576	FLJ31812 MRX91 DHC15
<i>ZDHC9</i>		300646	CGI-89 CXorf11 ZNF379 DHC9 ZNF380 ZDHC10
<i>ZEB1</i>		189909	TCF8 FECD6 BZP AREB6 PPCD3 ZEB Zfhep NIL-2-A Zfhx1a
<i>ZEB2</i>		605802	SIP1 SIP-1 KIAA0569 ZFHX1B
<i>ZFHX3</i>		104155	ATBF1 C16orf47 ZNF927 FLJ26184
<i>ZFP36L1</i>		601064	BRF1 Berg36 RNF162B ERF1 cMG1 TIS11B
<i>ZFP57</i>		612192	bA145L22.2 bA145L22 C6orf40 ZNF698
<i>ZFPM2</i>		603693	ZC2HC11B ZNF89B hFOG-2 FOG2
<i>ZFR</i>		615635	SPG71 ZFR1
<i>ZFYVE19</i>	NM_001077268.2:all NM_001258420.2:all NM_001258421.2:all NM_032850.2-12	619635	ANCHR FLJ14840 MPFYVE
<i>ZFYVE26</i>		612012	SPG15

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			KIAA0321
ZFYVE27	NM_001385876:4 NM_001385882:12 NM_001385883:12 NM_001385884:12	610243	FLJ32919 SPG33
ZHX3	NM_001384325:4	609598	TIX1 KIAA0395
ZIC1		600470	ZNF201 ZIC
ZIC2		603073	HPE5
ZIC3		300265	HTX1 HTX ZNF203
ZMPSTE24		606480	PRO1 HGPS Ste24p FACE-1 STE24
ZMYM3		300061	ZNF261 MYM DXS6673E KIAA0385 ZNF198L2
ZMYM6		613567	Buster2 ZBED7 KIAA1353 ZNF258 MYM ZNF198L4
ZMYND10		607070	DNAAF7 BLU CILD22
ZMYND11	NM_001370116:1 NM_001370120:1	608668	BRAM1 BS69
ZMYND15		614312	DKFZp434N127
ZNF141	NM_001348278:5 NM_001348279:4 NM_001348280:4	194648	pHZ-44 D4S90
ZNF143		603433	SBF STAF pHZ-1
ZNF148	NM_001348436:9	601897	BERF-1 ZBP-89 HT-BETA ZFP148 pHZ-52 BFCOL1
ZNF224		194555	KOX22 BMZF-2 ZNF27

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

Coding exons are covered for all RefSeg transcripts except those noted below.

Bold = preferred transcript

Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			ZNF255
ZNF335		610827	NIF-1 bA465L10.2
ZNF34		194526	KOX32
ZNF365		607818	UAN Su48 KIAA0844
ZNF407		615894	KIAA1703 FLJ13839 FLJ20307
ZNF408		616454	FLJ12827
ZNF41		314995	MRX89 MGC8941
ZNF423	NM_001379286:1	604557	hOAZ Ebfaz JBTS19 OAZ Zfp104 KIAA0760 NPHP14
ZNF469		612078	Zfp469 KIAA1858
ZNF512B		617886	MGC149845 GM632 MGC149846
ZNF513		613598	FLJ32203 Zfp513 RP58
ZNF526		614387	MGC4267 KIAA1951
ZNF528		615580	KIAA1827
ZNF543		616847	DKFZp434H055
ZNF589		616702	SZF1
ZNF592	NM_014630:11	613624	CAMOS SCAR5 KIAA0211
ZNF644		614159	KIAA1221 BM-005 MGC70410 MGC60165
ZNF674		300573	ZNF673B MRX92
ZNF687		610568	KIAA1441
ZNF711		314990	ZNF5 MRX97 dJ75N13.1 CMPX1 ZNF4 ZNF6 MRX65

CRITICALLY ILL RAPID GENETIC DIAGNOSIS PANEL GENE LIST

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Gene Symbol	Coding Exons Not Covered	OMIM Number	Gene Aliases
			Zfp711
<i>ZNF750</i>		610226	FLJ13841 Zfp750
<i>ZNF81</i>	NM_001378154:6 NM_001378155:5	314998	MRX45 HFZ20
<i>ZNHIT6</i>			C1orf181 FLJ20729 NY-BR-75 BCD1
<i>ZP1</i>		195000	ZPB1
<i>ZPBP</i>		608498	ZPBP1 SP38
<i>ZSWIM6</i>	NM_020928:1	615951	KIAA1577