Client: Example Client ABC123
123 Test Drive
Salt Lake City, UT 84108
UNITED STATES

Physician: Doctor, Example

Patient: Patient, Example

DOB	Unknown
Gender:	Unknown
Patient Identifiers:	01234567890ABCD, 012345
Visit Number (FIN):	01234567890ABCD
Collection Date:	00/00/0000 00:00

Neuronal Nuclear Antibody (ANNA) IFA Titer, IgG, CSF (Do NOT give this test code to clients - Panel Component ONLY. Refer to 2010841.)

ARUP test code 2010843

Neuronal Nuclear Ab Titer, IgG CSF	1:80 *	(Ref Interval: < 1:1)

INTERPRETIVE INFORMATION: Neuronal Nuclear Ab Titer, IgG CSF

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

Autoimmune Myelopathy Panel, CSF

ARUP test code 3006209

Paraneoplastic Abs (PCCA/ANNA) IgG, CSF	ANNA Detected *	(Ref Interval: None Detected)

Antibodies detected, therefore IFA titer and Immunoblot testing to be performed.

INTERPRETIVE INFORMATION: Paraneoplastic Abs (PCCA/ANNA) IgG, CSF

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

Neuromyelitis Optica/AQP4-IgG, CSF	Detected *	(Ref Interval: < 1:1)

Aquaporin-4 Receptor Antibody, IgG is detected. Titer results to follow.

H=High, L=Low, *=Abnormal, C=Critical

INTERPRETIVE INFORMATION: Neuromyelitis Optica/AQP4-IgG, CSF

Diagnosis of neuromyelitis optica (NMO) requires the presence of longitudinally extensive acute myelitis (lesions extending over 3 or more vertebral segments) and optic neuritis. Approximately 75 percent of patients with NMO express antibodies to the aquaporin-4 (AQP4) receptor. While the absence of AQP4 receptor antibodies does not rule out a diagnosis of NMO, presence of this antibody is diagnostic for NMO.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

GABA-B Receptor Ab IgG Screen, CSF	**Detected**	*	**(Ref Interval: < 1:1)**

GABA-BR Antibody, IgG is detected. Titer results to follow.

INTERPRETIVE INFORMATION: GABA-B Receptor Ab IgG Screen, CSF

Gamma-amino butyric acid receptor, type B (GABA-BR) antibody is found in a subset of patients with autoimmune limbic encephalitis and may occur with or without associated tumor. Decreasing antibody levels may be associated with therapeutic response; therefore, clinical correlation must be strongly considered. A negative test result does not rule out a diagnosis of autoimmune encephalitis.

This indirect fluorescent antibody assay utilizes GABA-BR transfected cell lines for the detection and semi-quantification of GABA-BR IgG antibody.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

CV2.1 Ab IgG Screen, CSF	**Detected**	*	**(Ref Interval: < 1:1)**

CV2.1 Antibody, IgG is detected. Titer results to follow. Additional charges apply.

INTERPRETIVE INFORMATION: CV2.1 IgG Ab Screen, CSF

CV2.1 antibodies aid in discriminating between chronic paraneoplastic neurological disorder (PND) and other inflammatory disorders of the nervous system. Anti-CV2.1 is associated with small-cell lung cancer and thymoma.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

SOX1 Antibody, IgG by Immunoblot, CSF	**High Positive**	*	**(Ref Interval: Negative)**

H=High, L=Low, *=Abnormal, C=Critical

INTERPRETIVE INFORMATION: SOX1 Antibody, IgG by Immunoblot, CSF

SOX1 antibody is detected in patients with Lambert-Eaton myasthenic syndrome (LEMS) and in patients with paraneoplastic cerebellar degeneration (PCD), paraneoplastic and nonparaneoplastic neuropathy. SOX1 antibody is associated with small cell lung cancer. A negative test result does not rule out a diagnosis of LEMS or other causes of paraneoplastic neurological syndrome.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the U.S. Food and Drug Administration. This test was performed in a CLIA-certified laboratory and is intended for clinical purposes.

Amphiphysin Antibody, CSF	**Positive**	*	**(Ref Interval: Negative)**

INTERPRETIVE INFORMATION: Amphiphysin Antibody IgG, CSF

Amphiphysin antibody is present in about 5 percent of patients with stiff-person syndrome and is found variably in other causes of paraneoplastic neurological syndrome (PNS). Amphiphysin antibody is mainly associated with small-cell lung cancer and breast tumors.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

DPPX Ab IgG CBA IFA Screen, CSF	**Detected**	*	**(Ref Interval: < 1:1)**

DPPX Antibody, IgG is detected. Titer results to follow.

INTERPRETIVE INFORMATION: DPPX Ab IgG CBA IFA Screen, CSF

Anti-DPPX IgG antibody is found in a subset of patients with autoimmune encephalitis and may occur with or without associated tumor. Decreasing antibody levels may be associated with therapeutic response; therefore, clinical correlation must be strongly considered. A negative test result does not rule out a diagnosis of autoimmune limbic encephalitis.

This indirect fluorescent antibody cell-based assay (CBA) utilizes dipeptidyl aminopeptidase-like protein 6 (DPPX) transfected cells for the detection of the DPPX IgG antibody.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

mGluR1 Ab IgG CBA-IFA Screen, CSF	**Detected**	*	**(Ref Interval: < 1:1)**

mGluR1 Antibody, IgG is detected. Titer results to follow.

H=High, L=Low, *=Abnormal, C=Critical

INTERPRETIVE INFORMATION: mGluR1 Ab IgG CBA-IFA Screen, CSF

Metabotropic glutamate receptor 1 (mGluR1) antibody is found in a subset of patients with autoimmune cerebellar ataxia or autoimmune encephalitis and may occur with or without associated tumor. A negative test result does not rule out a diagnosis of autoimmune cerebellar ataxia or limbic encephalitis. Interpretation of any anti-neural antibody test requires clinical correlation.

This indirect fluorescent antibody assay utilizes mGluR1 transfected cell lines for detection and semi-quantification of mGluR1 IgG antibody.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the U.S. Food and Drug Administration. This test was performed in a CLIA-certified laboratory and is intended for clinical purposes.

Glutamic Acid Decarboxylase Antibody CSF	15.0 IU/mL	H	(Ref Interval: 0.0-5.0)

INTERPRETIVE INFORMATION: Glutamic Acid Decarboxylase Antibody, CSF

A value greater than 5.0 IU/mL is considered positive for glutamic acid decarboxylase antibody (GAD AB CSF).

This assay is intended for the semi-quantitative determination of the GAD Ab in human CSF. Results should be interpreted within the context of clinical symptoms.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

Aquaporin-4 Receptor Antibody, IgG by IFA, CSF Titer (Reflex for 2011699 AQP4 CSF - Not Orderable by Clients)

ARUP test code 2011701

Neuromyelitis Optica/AQP4-IgG Titer, CSF	1:20	*	(Ref Interval: < 1:1)

INTERPRETIVE INFORMATION: Neuromyelitis Optica/AQP4-IgG Titer, CSF

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

Gamma Aminobutyric Acid Receptor , Type B (GABA-BR) Antibody Titer, IgG, CSF (Reflex of 3001267 GABA CSF - Not orderable by clients)

ARUP test code 3001273

GABA-B Receptor Ab IgG Titer, CSF	1:80	*	(Ref Interval: < 1:1)

H=High, L=Low, *=Abnormal, C=Critical

INTERPRETIVE INFORMATION: GABA-B Receptor Ab IgG Titer, CSF

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

CV2.1 Antibody Titer IgG, CSF (Reflex for 3002257 CV2.1 CSF - Not orderable by clients)

ARUP test code 3002258

CV2.1 Antibody IgG Titer by IFA, CSF	1:20	*	(Ref Interval: < 1.1)

INTERPRETIVE INFORMATION: CV2.1 Antibody IgG Titer by IFA, CSF
This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

Neuronal Nuclear Antibodies (Hu, Ri, Yo, Tr/DNER) IgG by Immunoblot, CSF

ARUP test code 3004527

Neuronal Nuclear Ab (Hu) IgG, IB, CSF	Positive	*	(Ref Interval: Negative)

INTERPRETIVE INFORMATION: Neuronal Nuclear Ab (Hu) IgG, IB, CSF
This test detects IgG antineuronal antibodies to Hu, Ri, and Yo and Tr (DNER) antigens.

Antineuronal antibodies serve as markers that aid in discriminating between a true paraneoplastic neurological disorder (PND) and other inflammatory disorders of the nervous system. Anti-Hu (antineuronal nuclear antibody, type I) is associated with small cell lung cancer. Anti-Ri (antineuronal nuclear antibody, type II) is associated with neuroblastoma in children and with fallopian tube and breast cancer in adults. Anti-Yo (anti-Purkinje cell cytoplasmic antibody) is associated with ovarian and breast cancer. Anti-Tr(DNER) is associated with Hodgkin's lymphoma.

The presence of one or more of these antineuronal antibodies supports a clinical diagnosis of PND and should lead to a focused search for the underlying neoplasm.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

Neuronal Nuclear Ab (Ri) IgG, IB, CSF	Positive	*	(Ref Interval: Negative)

INTERPRETIVE INFORMATION: Neuronal Nuclear Ab (Ri) IgG, IB, CSF
This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

Neuronal Nuclear Ab (Yo) IgG, IB, CSF	Positive	*	(Ref Interval: Negative)

H=High, L=Low, *=Abnormal, C=Critical

INTERPRETIVE INFORMATION: Neuronal Nuclear Ab (Yo) IgG, IB, CSF
This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

Neuronal Nuclear Ab (TR/DNER) IgG, CSF	Positive *	(Ref Interval: Negative)

INTERPRETIVE INFORMATION: Neuronal Nuclear Ab (TR/DNER) IgG, CSF
This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

Dipeptidyl Aminopeptidase-Like Protein 6 (DPPX) Antibody Titer, IgG, CSF (Reflex of 3004512 DPPX CSF - Not orderable by clients)

ARUP test code 3004515

DPPX Ab IgG CBA IFA Titer, CSF	1:20 *	(Ref Interval: < 1:1)

INTERPRETIVE INFORMATION: DPPX IgG Ab Titer, CSF

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

Metabotropic Glutamate Receptor 1 (mGluR1) Antibody Titer, IgG by CBA-IFA, CSF (Reflex of MGLUR1 CSF - Not Orderable by Clients)

ARUP test code 3006042

mGluR1 Ab IgG CBA-IFA Titer, CSF	1:20 *	(Ref Interval: < 1:1)

INTERPRETIVE INFORMATION: mGluR1 Ab IgG CBA-IFA Titer, CSF

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the U.S. Food and Drug Administration. This test was performed in a CLIA-certified laboratory and is intended for clinical purposes.

VERIFIED/REPORTED DATES

Procedure	Accession	Collected	Received	Verified/Reported
Neuronal Nuclear Ab Titer, IgG CSF	23-135-109181	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Paraneoplastic Abs (PCCA/ANNA) IgG, CSF	23-135-109181	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Neuromyelitis Optica/AQP4-IgG Titer, CSF	23-135-109181	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Neuromyelitis Optica/AQP4-IgG, CSF	23-135-109181	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
GABA-B Receptor Ab IgG Screen, CSF	23-135-109181	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
GABA-B Receptor Ab IgG Titer, CSF	23-135-109181	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
CV2.1 Ab IgG Screen, CSF	23-135-109181	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
CV2.1 Antibody IgG Titer by IFA, CSF	23-135-109181	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
SOX1 Antibody, IgG by Immunoblot, CSF	23-135-109181	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Neuronal Nuclear Ab (Hu) IgG, IB, CSF	23-135-109181	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Neuronal Nuclear Ab (Ri) IgG, IB, CSF	23-135-109181	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Neuronal Nuclear Ab (Yo) IgG, IB, CSF	23-135-109181	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Amphiphysin Antibody, CSF	23-135-109181	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
DPPX Ab IgG CBA IFA Screen, CSF	23-135-109181	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
DPPX Ab IgG CBA IFA Titer, CSF	23-135-109181	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Neuronal Nuclear Ab (TR/DNER) IgG, CSF	23-135-109181	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
mGluR1 Ab IgG CBA-IFA Screen, CSF	23-135-109181	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
mGluR1 Ab IgG CBA-IFA Titer, CSF	23-135-109181	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Glutamic Acid Decarboxylase Antibody CSF	23-135-109181	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00

END OF CHART

H=High, L=Low, *=Abnormal, C=Critical