ARUP LABORATORIES
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Jonathan R. Genzen, MD, PhD, Chief Medical Officer

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

Physician: Doctor, Example

Patient: Patient, Example

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

Kell K/k (KEL) Antigen Genotyping

ARUP test code 3002001

KEL GENO Specimen	Whole Blood
KEL Genotype	k/k

Indication for testing: Determine parental or neonatal Kell genotype to assess risk for alloimmune hemolytic disease.

Kell Genotype: k/k

Interpretation: Two copies of the KEL*02 (k) allele were detected in this whole blood sample; the KEL*01 (K) allele was not detected. This genotype is predictive of a Kell negative phenotype (also referred to as K-k+). This individual is homozygous for the k allele; thus, not at risk for transmitting a K allele, associated with a Kell positive phenotype, to offspring.

This result has been reviewed and approved by Rong Mao, M.D.

BACKGROUND INFORMATION: Kell K/k (KEL) Antigen Genotyping

CHARACTERISTICS: Erythrocyte alloimmunization may result in hemolytic transfusion reactions or hemolytic disease of the fetus and newborn (HDFN).
K ANTIGEN FREQUENCY: 9 percent of Whites, 2 percent of African Americans, rare in Asians.
INHERITANCE: Co-dominant.
CAUSE: Antigen-antibody mediated red-cell hemolysis between donor/recipient or transferred maternal antibodies.
POLYMORPHISM TESTED: Kell blood group KEL*01 (K), KEL*02 (k): c.578C>T, p.Thr193Met. The presence of KEL*01 allele predicts a K positive phenotype.
CLINICAL SENSITIVITY: 99 percent.
METHODOLOGY: Immucor PreciseType(TM) HEA Molecular BeadChip which is FDA-approved for clinical testing.
ANALYTIC SENSITIVITY AND SPECIFICITY: 99 percent.
LIMITATIONS: Rare nucleotide changes leading to altered or partial antigen expression and null phenotypes are not detected by this assay. Patients who have had hematopoietic stem cell transplants may have inconclusive results on this test. Abnormal signal intensities may result in indeterminate genotyping results.

Counseling and informed consent are recommended for genetic testing. Consent forms are available online.

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

VERIFIED/REPORTED DATES

Procedure	Accession	Collected	Received	Verified/Reported
KEL GENO Specimen	23-318-101636	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
KEL Genotype	23-318-101636	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