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	[redacted]/2003
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.

Genotype: Homozygous little k

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

This result has been reviewed and approved by [redacted]

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: Up to 0.25 Arab, 0.12 Iranian Jew, 0.09 White, 0.02 African American, rare Asian.
INHERITANCE: Codominant.
CAUSE: Antigen-antibody mediated red-cell hemolysis between donor/recipient or transferred maternal antibodies. The anti-K antibody is a frequent cause of HDFN.
POLYMORPHISM TESTED: KEL c.578C>T, p.Thr193Met. Assesses for Kell blood group antigens, K and k.
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	25-342-101530	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
KEL Genotype	25-342-101530	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