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]/2001
Gender:	Female
Patient Identifiers:	01234567890ABCD, 012345
Visit Number (FIN):	01234567890ABCD
Collection Date:	00/00/0000 00:00

Kell K/k (KEL) Antigen Genotyping, Fetal

ARUP test code 3016676

KEL Genotype, Fetal Specimen	Direct Amnio
KEL Genotype Fetal, Interpretation	k/k

Please send any postnatal outcomes concerning this prenatal result to ARUP Genetic Counseling fax: 801-584-5236.

Indication for testing: Determine fetal Kell genotype to assess risk for alloimmune hemolytic disease.

Fetal genotype: Homozygous little k

Interpretation: Two copies of the little k allele were detected in this fetal sample; the big K allele was not detected. This genotype is predictive of a Kell-negative phenotype (also referred to as K-k+) in this fetus. If the pregnant patient is sensitized to big K antigen, this fetus is predicted to not be at risk for anti-K-mediated alloimmune hemolytic disease.

This result has been reviewed and approved by [redacted]

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

BACKGROUND INFORMATION: Kell K/k (KEL) Antigen Genotyping, Fetal
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/polymerase chain reaction (PCR)/fragment analysis.
ANALYTIC SENSITIVITY AND SPECIFICITY: 99 percent.
LIMITATIONS: Bloody amniotic fluid samples may give false-negative results because of maternal cell contamination. 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.

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.

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

VERIFIED/REPORTED DATES

Procedure	Accession	Collected	Received	Verified/Reported
KEL Genotype, Fetal Specimen	25-342-101538	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
KEL Genotype Fetal, Interpretation	25-342-101538	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