

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, Fetal**

ARUP test code 3016676

Maternal Contamination Study Fetal Spec	Fetal Cells  Single fetal genotype present; no maternal cells present. Fetal and maternal samples were tested using STR markers to rule out maternal cell contamination.
Maternal Contam Study, Maternal Spec	whole Blood
KEL Genotype, Fetal Specimen	Cultured Amnio
KEL Genotype Fetal, Interpretation	K/K  Indication for testing: Determine fetal kell genotype to assess risk for alloimmune hemolytic disease.  Fetal kell genotype: K/K  Interpretation: Two copies of the KEL*01 (K) allele were detected in this fetal sample; the KEL*02 (k) allele was not detected. This genotype is predictive of a Kell positive phenotype (also referred to as K+k-) in this fetus. Clinical correlation is recommended.  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:** 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/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 US 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
Maternal Contamination Study Fetal Spec	23-235-103470	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Maternal Contam Study, Maternal Spec	23-235-103470	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
KEL Genotype, Fetal Specimen	23-235-103470	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
KEL Genotype Fetal, Interpretation	23-235-103470	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