

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\*01 (K) allele were detected in this whole blood sample; the KEL\*02 (k) allele was not detected. This genotype is predictive of a Kell positive phenotype (also referred to as K+k-). All of this individual's offspring will inherit the KEL\*01 (K) allele associated with a Kell positive phenotype.

This result has been reviewed and approved

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. Parints who have had homotopoints stam call 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

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VERIFIED/REPORTED DATES				
Procedure	Accession	Collected	Received	Verified/Reported
KEL GENO Specimen	23-318-102019	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
KEL Genotype	23-318-102019	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

Patient: Patient, Example
ARUP Accession: 23-318-102019
Patient Identifiers: 01234567890ABCD, 012345
Visit Number (FIN): 01234567890ABCD
Page 2 of 2 | Printed: 11/14/2023 11:18:15 AM

4848