

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

## RhE/e (RHCE) Antigen Genotyping

ARUP test code 3002003

**RHE GENO Specimen** 

Whole Blood

RhEe Genotype

E/e

Indication for testing: Determine parental or neonatal RhEe genotype to assess risk for alloimmune hemolytic disease. RhEe genotype: E/e
Interpretation: One copy of the RHCE\*3 (E) allele and one copy of the RHCE\*5 (e) allele were detected in this whole blood sample. This genotype predicts expression of both E and e antigen (also referred to as RhE+e+ phenotype). Offspring of this individual have a 50 percent chance of inheriting the RHCE\*3 (E) allele and a 50 percent chance of inheriting RHCE\*5 (e) allele.

This result has been reviewed and approved by ■

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

4848



BACKGROUND INFORMATION: RhE/e (RHCE) Antigen Genotyping

CHARACTERISTICS: Erythrocyte alloimmunization may result in hemolytic transfusion reactions or hemolytic disease of the fetus and newborn (HDFN).

E ANTIGEN FREQUENCY: 0.29 White, 0.22 African American, 0.39 Asian.

e ANTIGEN FREQUENCY: 0.98 White, 0.98 African American, 0.96 Asian.

INHERITANCE: Co-dominant.

CAUSE: Antigen-antibody mediated red-cell hemolysis between donor/recipient or transferred maternal antibodies. POLYMORPHISM TESTED: Rh blood group RHCE\*3 (E), RHCE\*5 (e):

POLYMORPHISM TESTED: Rh blood group RHCE\*3 (E), RHCE\*5 (e): c.676G>C; p.Ala226Pro.
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. This assay is occasionally limited in predicting genotype due to extreme variation in the Rh locus.
False-negative Rhe predictions may result due to RHCE-D-CE fusion genes. Patients who have had hematopoietic stem cell transplants may have inconclusive results on this test. Abnormal transplants may have inconclusive results on this test. Abnormal signal intensities may result in indeterminate genotyping

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

| VERIFIED/REPORTED DATES |               |                  |                  |                   |
|-------------------------|---------------|------------------|------------------|-------------------|
| Procedure               | Accession     | Collected        | Received         | Verified/Reported |
| RHE GENO Specimen       | 23-234-101511 | 00/00/0000 00:00 | 00/00/0000 00:00 | 00/00/0000 00:00  |
| RhEe Genotype           | 23-234-101511 | 00/00/0000 00:00 | 00/00/0000 00:00 | 00/00/0000 00:00  |

results.

**END OF CHART** 

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