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	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: Two copies of the RHCE*5 (e) allele were detected in this whole blood sample; the RHCE*3 (E) allele was not identified. Homozygosity for e allele predicts expression of e antigen and lack of expression of E antigen (also referred to as RhE-e+ phenotype). All of this individual's offspring will inherit the RHCE*5 (e) allele associated with an Rhe positive phenotype.

This result has been reviewed and approved by Rong Mao, M.D.

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

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): 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 signal intensities may result in indeterminate genotyping results.

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	23-318-101943	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
RhEe Genotype	23-318-101943	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