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]/1994
Gender:	Female
Patient Identifiers:	01234567890ABCD, 012345
Visit Number (FIN):	01234567890ABCD
Collection Date:	00/00/0000 00:00

RhE/e (RHCE) Antigen Genotyping, Fetal

ARUP test code 3016682

RHE GENO, Fetal Specimen	Direct Amnio
RhEe Genotype Fetal, Interp	E/E

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

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

Fetal genotype: Homozygous E

Interpretation: Two copies of the E allele were detected in this prenatal sample; the e allele was not identified. Homozygosity for the E allele predicts expression of E antigen and lack of expression of e antigen (also referred to as RhE+e- phenotype) in this fetus. If the pregnant patient is sensitized to e antigen, this fetus is predicted to not be at risk for anti-e-mediated alloimmune hemolytic disease.

This result has been reviewed and approved by [redacted]

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

BACKGROUND INFORMATION: RhE/e (RHCE) Antigen Genotyping, Fetal
CHARACTERISTICS: Erythrocyte alloimmunization may result in hemolytic transfusion reactions or hemolytic disease of the fetus and newborn (HDFN).
E ANTIGEN FREQUENCY: 0.22 African American, 0.39 Asian, 0.29 White.
e ANTIGEN FREQUENCY: 0.98 African American, 0.96 Asian, 0.98 White.
INHERITANCE: Codominant.
CAUSE: Antigen-antibody mediated red-cell hemolysis between donor/recipient or transferred maternal antibodies.
POLYMORPHISM TESTED: RHCE c.676G>C; p.Ala226Pro. Assesses for Rh blood group antigens E and e.
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. 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.

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
RHE GENO, Fetal Specimen	25-342-101793	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
RhEe Genotype Fetal, Interp	25-342-101793	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