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

RhC/c (RHCE) Antigen Genotyping

ARUP test code 3002002

RHC GENO Specimen	Whole Blood
RhCc Genotype	C/C

Indication for testing: Determine parental or neonatal RhCc genotype to assess risk for alloimmune hemolytic disease.
RhCc genotype: C/C
Interpretation: Two copies of the RHCE*2 (C) allele were detected in this whole blood sample; the RHCE*4 (c) allele was not identified. Homozygosity for the C allele predicts expression of C antigen and lack of expression of c antigen (also referred to as RhC+c- phenotype). All of this individual's offspring will inherit the RHCE*2 (C) allele associated with an RhC positive phenotype.

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

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

BACKGROUND INFORMATION: RhC/c (RHCE) Antigen Genotyping

CHARACTERISTICS: Erythrocyte alloimmunization may result in hemolytic transfusion reactions or hemolytic disease of the fetus and newborn (HDFN).
C ANTIGEN FREQUENCY: 0.68 White, 0.27 African American, 0.93 Asian.
c ANTIGEN FREQUENCY: 0.80 White, 0.98 African American, 0.47 Asian.
INHERITANCE: Co-dominant.
CAUSE: Antigen-antibody mediated red-cell hemolysis between donor/recipient or transferred maternal antibodies.
POLYMORPHISM TESTED: Rh blood group RHCE*2 (C), RHCE*4 (c): c.307C>T; p.Pro103Ser and 109bp insertion.
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 may not be detected by this assay. Genotypes resulting in Rh null phenotypes will not be assessed. This assay is occasionally limited in predicting genotype due to extreme variation in the Rh locus. False-negative RhC or Rhc 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
RHC GENO Specimen	23-233-119774	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
RhCc Genotype	23-233-119774	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