

Client: Example Client ABC123 123 Test Drive Salt Lake City, UT 84108 UNITED STATES

Physician: Doctor, Example

## **Patient: Patient, Example**

DOB 8/21/2022 Gender: Female

Patient Identifiers: 01234567890ABCD, 012345

**Visit Number (FIN):** 01234567890ABCD **Collection Date:** 00/00/0000 00:00

## Platelet Antigen Genotyping Panel, Fetal ARUP test code 3016673

Three test code 30100/3	
Platelet Antigen 1 Genotyping	a/b
Platelet Antigen 2 Genotyping	a/b
Platelet Antigen 3 Genotyping	a/b
Platelet Antigen 4 Genotyping	a/b
Platelet Antigen 5 Genotyping	a/b
Platelet Antigen 6 Genotyping	a/b
Platelet Antigen 15 Genotyping	a/b
Maternal Contamination Study Fetal Spec	Fetal Cells  Single fetal genotype present; no maternal cells present. Fetal and maternal samples were tested using STR markers to rule out maternal cell contamination.
Maternal Contam Study, Maternal Spec	Whole Blood
Platelet Antigen Geno, Fetal Specimen	Direct Amnio

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



## Platelet Antigen Geno Fetal, Interp

## See Note

HPA-la/b Heterozygous: One copy of the common human platelet antigen (HPA)-1 a allele and one copy of the less-common HPA-1 b allele were identified.

HPA-2a/b Heterozygous: One copy of the common human platelet antigen (HPA)-2 a allele and one copy of the less-common HPA-2 b allele were identified.

 $\mbox{HPA-3a/b}$  Heterozygous: One copy of the common human platelet antigen (HPA)-3 a allele and one copy of the less-common HPA-3 b allele were identified.

HPA-4a/b Heterozygous: One copy of the common human platelet antigen (HPA)-4 a allele and one copy of the less-common HPA-4 b allele were identified.

 $\mbox{HPA-5a/b}$  Heterozygous: One copy of the common human platelet antigen (HPA)-5 a allele and one copy of the less-common HPA-5 b allele were identified.

HPA 6-a/b Heterozygous: One copy of the common human platelet antigen (HPA)-6 a allele and one copy of the less-common HPA-6 b allele were identified.

HPA-15a/b Heterozygous: One copy of the human platelet antigen (HPA)-15 a allele and one copy of the HPA-15 b allele were identified.

Indication for testing: Fetal genotyping to assess risk for fetal alloimmune thrombocytopenia.

Interpretation: Fetal human platelet antigen (HPA) genotypes should be correlated with parental HPA genotypes for interpretation. A genetic discrepancy between maternal and fetal HPA is necessary, but not sufficient, to diagnose fetal alloimmune thrombocytopenia. Maternal antibody testing for genetically discrepant antigen(s) is recommended.

This result has been reviewed and approved by

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

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BACKGROUND INFORMATION: Platelet Antigen Genotyping Panel, Fetal

Characteristics: Spontaneous fetal intracranial bleeding may occur in 20 percent of pregnancies affected with severe perinatal alloimmune thrombocytopenia (PAT); there is a risk of fetal death. Post-transfusion purpura may occur in transfusion recipients with antibodies to a specific platelet antigen. Incidence: PAT occurs in 1 in 5000 births.

Inheritance: For women homozygous for the less common "b" HPA allele with antibodies to the common "a" allele, there is a 50 percent risk a pregnancy will be at risk if her partner is heterozygous for the "a" allele and 100 percent risk if her partner is homozygous for the "a" allele. Cause: Maternal-fetal HPA incompatibility.

Polymorphisms Tested: HPA-1 (ITGB3, GPIIIa) c.176T>C, p.L59P; HPA-2 (GP1BA, GPIba) c.482C>T, p.T161M; HPA-3 (ITGA2B, GPIIb) c.2621T>G, p.1874S; HPA-4 (ITGB3, GPIIIa) c.506G>A, p.R169Q; HPA-5 (ITGA2, GPIa) c.1600G>A, p.E534K; HPA-6 (ITGB3, GPIIIa) c.1544G>A, p.R515Q; HPA-15 (CD109, CD109) c.2108C>A, p.S703Y Clinical Sensitivity: Variable; dependent on ethnicity.

Methodology: Polymerase Chain Reaction (PCR)/Fluorescence Monitoring/Fragment Analysis.

Analytic Sensitivity and Specificity: 99 percent.

Limitations: Bloody amniotic fluid specimens may give false-negative results because of maternal cell contamination.

Diagnostic errors can occur due to rare sequence variations.

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.

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VERIFIED/REPORTED DATES					
Procedure	Accession	Collected	Received	Verified/Reported	
Platelet Antigen 1 Genotyping	23-234-118132	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00	
Platelet Antigen 2 Genotyping	23-234-118132	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00	
Platelet Antigen 3 Genotyping	23-234-118132	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00	
Platelet Antigen 4 Genotyping	23-234-118132	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00	
Platelet Antigen 5 Genotyping	23-234-118132	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00	
Platelet Antigen 6 Genotyping	23-234-118132	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00	
Platelet Antigen 15 Genotyping	23-234-118132	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00	
Maternal Contamination Study Fetal Spec	23-234-118132	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00	
Maternal Contam Study, Maternal Spec	23-234-118132	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00	
Platelet Antigen Geno, Fetal Specimen	23-234-118132	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00	
Platelet Antigen Geno Fetal, Interp	23-234-118132	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00	

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