

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

## **Platelet Antigen Genotyping Panel**

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ARUP test	code 3000193

Platelet Antigen Geno Specimen	Whole Blood
Platelet Antigen 1 Genotyping	b/b
Platelet Antigen 2 Genotyping	b/b
Platelet Antigen 3 Genotyping	b/b
Platelet Antigen 4 Genotyping	b/b
Platelet Antigen 5 Genotyping	b/b
Platelet Antigen 6 Genotyping	b/b
Platelet Antigen 15 Genotyping	b/b
Platelet Antigen Geno Interpretation	See Note

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

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Indication for testing: Parental or neonatal genotyping to assess risk for alloimmune thrombocytopenia.

HPA-1b/b Homozygous: Two copies of the less-common human platelet antigen (HPA)-1 "b" allele were identified.

HPA-2b/b Homozygous: Two copies of the less-common human platelet antigen (HPA)-2 "b" allele were identified.

HPA-3b/b Homozygous: Two copies of the less-common human platelet antigen (HPA)-3 "b" allele were identified.

HPA 4-b/b Homozygous: Two copies of the less-common human platelet antigen (HPA)-4 "b" allele were identified.

HPA-5b/b Homozygous: Two copies of the less-common human platelet antigen (HPA)-5 "b" allele were identified.

HPA-6b/b Homozygous: Two copies of the less-common human platelet antigen (HPA)-6 "b" allele were identified.

HPA 15-b/b Homozygous: Two copies of the human platelet antigen (HPA)-15 "b" allele were identified.

This result has been reviewed and approved by Yuan Ji, Ph.D.

BACKGROUND INFORMATION: Platelet Antigen Genotyping Panel

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.

Analytic Sensitivity and Specificity: 99 percent.

Limitations: Diagnostic errors can occur due to rare sequence variations. Interpretation of this test result may be impacted if this patient has had an allogeneic stem cell transplantation.

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 Geno Specimen	23-234-103043	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00	
Platelet Antigen 1 Genotyping	23-234-103043	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00	
Platelet Antigen 2 Genotyping	23-234-103043	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00	
Platelet Antigen 3 Genotyping	23-234-103043	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00	
Platelet Antigen 4 Genotyping	23-234-103043	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00	
Platelet Antigen 5 Genotyping	23-234-103043	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00	
Platelet Antigen 6 Genotyping	23-234-103043	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00	
Platelet Antigen 15 Genotyping	23-234-103043	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00	
Platelet Antigen Geno Interpretation	23-234-103043	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