

500 Chipeta Way, Salt Lake City, Utah 84108-1221

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Jonathan R. Genzen, MD, PhD, Chief Medical Officer

Client: ARUP Example Report Only

500 Chipeta Way

Salt Lake City, UT 84108-

USA

Provider: .108 -TEST,

Patient: HPA GENO, POSITIVE

DOB:

Sex: Male

Patient Identifiers: 40658

Visit Number (FIN): 40983

Client Supplied ID:

Specimen Collected: 19-Sep-22 16:27

Platelet Antigen Genotyping Profile | **Received:** 19-Sep-22 16:38 | **Report/Verified:** 20-Sep-22 11:55

Procedure	Result	Units	Reference Interval
Platelet Antigen Geno Specimen	Whole Blood		
Platelet Antigen 1 Genotyping	a/a		
Platelet Antigen 2 Genotyping	a/b		
Platelet Antigen 3 Genotyping	a/b		
Platelet Antigen 4 Genotyping	a/a		
Platelet Antigen 5 Genotyping	a/a		
Platelet Antigen 6 Genotyping	a/a		
Platelet Antigen 15 Genotyping	a/b		
Platelet Antigen Geno Interpretation	See Note ^{f1 i1}		

Result Footnote

f1: Platelet Antigen Geno Interpretation

HPA-1a/a Homozygous: Two copies of the common human platelet antigen (HPA)-1 a 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.

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

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

HPA-6a/a Homozygous: Two copies of the common human platelet antigen (HPA)-6 a 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: Assess risk for alloimmune thrombocytopenia.

*=Abnormal, #=Corrected, C=Critical, f=Result Footnote, H-High, i-Test Information, L-Low, t-Interpretive Text, @=Performing lab

Unless otherwise indicated, testing performed at:

ARUP Laboratories

500 Chipeta Way, Salt Lake City, UT 84108

Laboratory Director: Jonathan R. Genzen, MD, PhD

ARUP Accession: 22-262-900232

Report Request ID: 16422924

Printed: 20-Sep-22 13:04

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Patient: HPA GENO, POSITIVE**DOB:****Patient Identifiers:** 40658**Result Footnote**

f1: Platelet Antigen Geno Interpretation

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

Test Information

i1: Platelet Antigen Geno Interpretation

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 affected 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.I874S; 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: PCR followed by fluorescent monitoring.

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.

Informed consent: Recommended; forms are available at www.aruplab.com.

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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