Patient ID	Patient Name		Birth Date	Gender	Age
SA00142882	VALIDATIONTESTING, HAEV1		1978-08-08	M	42
Order Number	**Client Order Number**	**Ordering Physician**	**Report Notes**		
SA00142882	SA00142882	CLIENT,CLIENT			
Account Information		**Collected**			
C7028846 DLMP Rochester		01 Mar 2021 15:00			

Hemolytic Anemia Evaluation

Hemolytic Anemia Interpretation

MCR

HEMOGLOBIN ELECTROPHORESIS INTERPRETATION:

No abnormal hemoglobin variant or thalassemia is detected by protein analysis methods. Stability studies are normal. Rare causes of hemolysis such as hyperunstable hemoglobin variants have not been excluded. If molecular testing is desired, please call the Metabolic Hematology Laboratory (1–800–533–1710).

RBC ENZYME INTERPRETATION:

All RBC enzyme activity levels are normal or elevated. Elevated activity levels can be present in neonates or due to reticulocytosis.

OSMOTIC FRAGILITY/EMA BINDING INTERPRETATION:

Osmotic fragility testing: Normal lysis EMA binding test (Band 3 assay) by flow cytometry: Normal staining pattern

Interpretation: The osmotic fragility and EMA binding (Band 3) test results are not supportive of a diagnosis of hereditary spherocytosis. No EMA binding features of hereditary pyropoikilocytosis are seen. Non-hemolytic hereditary elliptocytosis cases typically show normal results and these findings do not exclude a red blood cell membrane disorder.

If clinical suspicion for a hereditary cause of hemolytic anemia persists, a comprehensive sequencing panel is available. If desired, please order the Hereditary Hemolytic Anemia Comprehensive Sequencing (test code, NGHHA) or call the Metabolic Hematology Laboratory at 1–800–533–1710 to add on testing to this sample. Note: Whether received with the HAEV1 or NGHHA, a patient information sheet or clinical notes containing pertinent clinical information is imperative for interpretation of the NGHHA genetic panel.

Reviewed By

MCR

JENNIFER MAIN

Hb Variant, A2 and F Quantitation,B

Result Name	Value	Unit	Reference Value	Performing Site
Hb A	97.0	%	95.8–98.0	MCR
Hb F	0.5	%	0.0–0.9	MCR
Hb A2	2.5	%	2.0–3.3	1 MCR

Result Name	Value	Unit	Reference Value	Performing Site
HPLC Hb Variant, B	See Interpretation			1 MCR
Hb Stability, B	Normal			2 MCR

REFERENCE VALUE

Expected result is normal

Performing Site Legend

Code	Laboratory	Address	Lab Director	CLIA Certificate
MCR	Mayo Clinic Laboratories - Rochester Main Campus	200 First Street SW, Rochester, MN 55905	William G. Morice M.D. Ph.D	24D0404292

Environment Test EVP Template

MAYO CLINIC LABORATORIES

Patient ID	Patient Name		Birth Date	Gender	Age
SA00142882	VALIDATIONTESTING, HAEV1		1978-08-08	M	42
Order Number	**Client Order Number**	**Ordering Physician**	**Report Notes**		
SA00142882	SA00142882	CLIENT,CLIENT			
Account Information		**Collected**			
C7028846 DLMP Rochester		01 Mar 2021 15:00			

Osmotic Fragility

Result Name	Value	Unit	Reference Value	Performing Site
Osmotic Fragility, 0.50 g/dL NaCl	37	%hemol	3–53	MCR
Osmotic Fragility, 0.60 g/dL NaCl	42	%hemol	14–74	MCR
Osmotic Fragility, 0.65 g/dL NaCl	31	%hemol	4–40	MCR
Osmotic Fragility, 0.75 g/dL NaCl	8	%hemol	1–11	2 MCR

Result Name	Value	Unit	Reference Value	Performing Site
Shipping Control Vial	Received			MCR
Band 3 Fluorescence Staining, RBC	Normal			2 MCR
REFERENCE VALUE Expected result is normal				
G6PD Enzyme Activity, B	10.0	U/g Hb	8.0–11.9	2 MCR
PK Enzyme Activity, B	9.5	U/g Hb	5.5–12.4	2 MCR
Glucose Phosphate Isomerase, B	51.0	U/g Hb	40.0–58.0	2 MCR
Hexokinase, B	1.0	U/g Hb	0.7–1.7	2 MCR
Adenylate Kinase, B	250	U/g Hb	195–276	2 MCR
Phosphofructokinase, B	8.9	U/g Hb	5.8–10.9	2 MCR
Phosphoglycerate Kinase, B	195	U/g Hb	142–232	2 MCR
Triosephosphate Isomerase, B	1350	U/g Hb	1033–1363	2 MCR
Glutathione, B	52.5	mg/dL RBC	46.9–90.1	2 MCR

Pyrimidine 5' Nucleotidase, B

Result Name	Value	Unit	Reference Value	Performing Site
Pyrimidine 5' Nucleotidase, B	Normal			2 MCR
REFERENCE VALUE Expected result is normal				

Morphology Review

MCR

Morphologic review of the peripheral blood smear shows: no diagnostic abnormalities,

Received: 02 Mar 2021 12:20

Reported: 02 Mar 2021 12:28

Performing Site Legend

Code	Laboratory	Address	Lab Director	CLIA Certificate
MCR	Mayo Clinic Laboratories - Rochester Main Campus	200 First Street SW, Rochester, MN 55905	William G. Morice M.D. Ph.D	24D0404292

Test Environment EVP Template

MAYO CLINIC LABORATORIES

Patient ID	Patient Name		Birth Date	Gender	Age
SA00142882	VALIDATIONTESTING, HAEV1		1978-08-08	M	42
Order Number	**Client Order Number**	**Ordering Physician**	**Report Notes**		
SA00142882	SA00142882	CLIENT,CLIENT			
Account Information		**Collected**			
C7028846 DLMP Rochester		01 Mar 2021 15:00			

Test Environment
EVP Template

Laboratory Notes

1 This test has been modified from the manufacturer's instructions. Its performance characteristics were determined by Mayo Clinic in a manner consistent with CLIA requirements. This test has not been cleared or approved by the U.S. Food and Drug Administration.

2 This test was developed and its performance characteristics determined by Mayo Clinic in a manner consistent with CLIA requirements. This test has not been cleared or approved by the U.S. Food and Drug Administration.

Performing Site Legend

Code	Laboratory	Address	Lab Director	CLIA Certificate
MCR	Mayo Clinic Laboratories - Rochester Main Campus	200 First Street SW, Rochester, MN 55905	William G. Morice M.D. Ph.D	24D0404292