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PATIENT REPORT

Patient Age/Sex: 20 years Male

Specimen Collected: 5/11/2026 07:21 MDT

Hemoglobin HPLC and CE Eval with Reflex | **Received: 5/11/2026 07:21 MDT** | **Report/Verified: 5/11/2026 07:25 MDT**

Procedure	Result	Units	Reference Interval
Hemoglobin A	57.6 L	%	[95.0-97.9]
Hemoglobin A2	2.7	%	[2.0-3.5]
Hemoglobin F	0.7	%	[0.0-2.1]
Hemoglobin S	39.0 H	%	[0.0-0.0]
Hemoglobin C	0.0	%	[0.0-0.0]
Hemoglobin E	0.0	%	[0.0-0.0]
Hemoglobin Other	0.0	%	[0.0-0.0]
Hemoglobin Evaluation	HPLC Report f1 i1		
Sickle Cell Solubility Reflex	Conf Previous i2		

Result Footnote

f1: Hemoglobin Evaluation

Impression: Hb S present

Laboratory findings demonstrate the presence of Hb S. The percentage of Hb S in heterozygous Hb S (trait) ranges from 35-40% and is typically an asymptomatic condition. Homozygous Hb S (Hb SS) has predominantly Hb S without Hb A and is characterized by red blood cell sickling, severe hemolytic anemia, vaso-occlusive crisis, and other significant clinical manifestations.

Lower values of Hb S can be seen in compound heterozygous conditions for Hb S and alpha thalassemia. Hb S/alpha thalassemia is typically asymptomatic and associated with microcytosis. If clinically indicated, molecular confirmation by Alpha Globin (HBA1 and HBA2) Deletion/Duplication (ARUP test #2011622) should be considered.

Hb S/beta-plus thalassemia is typically characterized by more Hb S than Hb A with the presence of microcytosis. If microcytosis is present and Hb S/beta-plus thalassemia is suspected, Beta Globin (HBB) Sequencing (ARUP test #3004547) is suggested.

Hemoglobin analysis should be offered to the patient's family members to assess carrier status.

Please correlate clinically and in the context of recent transfusion history.

Test Information

i1: Hemoglobin Evaluation

INTERPRETIVE INFORMATION: Hemoglobin HPLC and CE Eval with Reflex

HPLC Report: Results from HPLC are reported. Results were confirmed by capillary electrophoresis.
See CE Report: Results from capillary electrophoresis are reported under Hemoglobin Evaluation by Capillary Electrophoresis (3017102). Results were confirmed by HPLC.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the U.S. Food and Drug

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

Test Information

i1: Hemoglobin Evaluation
Administration. This test was performed in a CLIA-certified laboratory and is intended for clinical purposes.

i2: Sickle Cell Solubility Reflex
INTERPRETIVE INFORMATION: Sickle Cell Solubility Reflex

Not Performed: Solubility testing for Hemoglobin S not indicated.
Positive: Positive for Hemoglobin S by HPLC and confirmed by solubility testing. Additional charges apply.
Conf Previous: Positive for Hemoglobin S by HPLC. Solubility testing performed previously and not repeated with this submission.