ARUP LABORATORIES
800-522-2787 | aruplab.com
500 Chipeta Way, Salt Lake City, UT 84108-1221
Jonathan R. Genzen, MD, PhD, Chief Medical Officer

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

Physician: Doctor, Example

Patient: Patient, Example

DOB	2/29/1992
Gender:	Female
Patient Identifiers:	01234567890ABCD, 012345
Visit Number (FIN):	01234567890ABCD
Collection Date:	00/00/0000 00:00

Hemoglobin Evaluation With Reflex to Electrophoresis and/or RBC Solubility

ARUP test code 3017101

Hemoglobin A	**55.5 %**	**L**	**(Ref Interval: 95.0-97.9)**
Hemoglobin A2	3.5 %		(Ref Interval: 2.0-3.5)
Hemoglobin F	0.3 %		(Ref Interval: 0.0-2.1)
Hemoglobin S	**40.7 %**	**H**	**(Ref Interval: 0.0-0.0)**
Hemoglobin C	0.0 %		(Ref Interval: 0.0-0.0)
Hemoglobin E	0.0 %		(Ref Interval: 0.0-0.0)
Hemoglobin Other	0.0 %		(Ref Interval: 0.0-0.0)
Hemoglobin Evaluation	See Note		

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

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.

INTERPRETIVE INFORMATION: Hemoglobin Evaluation, with Reflex to Electrophoresis and/or RBC Solubility

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

Sickle Cell Solubility Reflex	**Positive** *

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.

Hgb Capillary Electrophoresis Reflex	Not Performed

INTERPRETIVE INFORMATION: Hgb Capillary Electrophoresis Reflex

Not Performed: Confirmation by Capillary Electrophoresis not indicated.
Performed: Results confirmed by Capillary Electrophoresis. Additional charges apply.
Conf Previous: Capillary Electrophoresis confirmation performed as part of a previous submission. Confirmation not repeated with this submission.

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

VERIFIED/REPORTED DATES

Procedure	Accession	Collected	Received	Verified/Reported
Hemoglobin A	24-052-145646	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Hemoglobin A2	24-052-145646	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Hemoglobin F	24-052-145646	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Hemoglobin S	24-052-145646	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Hemoglobin C	24-052-145646	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Hemoglobin E	24-052-145646	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Hemoglobin Other	24-052-145646	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Hemoglobin Evaluation	24-052-145646	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Sickle Cell Solubility Reflex	24-052-145646	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Hgb Capillary Electrophoresis Reflex	24-052-145646	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