



Procedure	Result	Units	Ref Interval	Accession	Collected	Received	Reported/ Verified
Hemoglobin A2	5.3 H	%	[2.0-3.5]	20-176-900053	24-Jun-20 08:54:00	24-Jun-20 08:55:00	24-Jun-20 09:16:17
Hemoglobin F	10.5 H	%	[0.0-2.1]	20-176-900053	24-Jun-20 08:54:00	24-Jun-20 08:55:00	24-Jun-20 09:16:17
Hemoglobin A2 and F Interpretation	See Note f			20-176-900053	24-Jun-20 08:54:00	24-Jun-20 08:55:00	24-Jun-20 09:16:17
Hemoglobin, Capillary Electrophoresis	Performed			20-176-900053	24-Jun-20 08:54:00	24-Jun-20 08:55:00	24-Jun-20 09:16:17

24-Jun-20 08:54:00 Hemoglobin A2 and F Interpretation:

Abnormal hemoglobin present. Suggest hemoglobin evaluation for identification, (ARUP test #0050610).

Minor components of HbS and other hemoglobin variants eluting after HbA2 may co-elute with HbA2. This may result in a falsely elevated area percent value for HbA2.

Impression: Elevated Hb F

The increase in Hb F in this patient could be due to hereditary persistence of fetal hemoglobin (HPFH). HPFH is classified by the cellular distribution of Hb F into two forms with differing clinical significance. When the pancellular form (deletional-HPFH) is co-inherited with heterozygous Hb S, it results in the absence of Hb A but no sickling disorder. The more common heterocellular form when associated with homozygous Hb S produces an absence of Hb A with a sickle cell clinical phenotype. However, increased Hb F can also be seen in some acquired conditions such as leukemias, myeloproliferative disease, or treatments with certain drugs e.g. hydroxyurea. Please correlate clinically.

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

24-Jun-20 08:54:00 Hemoglobin F:
 REFERENCE INTERVAL: Hemoglobin F

Access complete set of age- and/or gender-specific reference intervals for this test in the ARUP Laboratory Test Directory (aruplab.com).

24-Jun-20 08:54:00 Hemoglobin A2 and F Interpretation:
 INTERPRETIVE INFORMATION: Hemoglobin A2 and F by Column
 w/Reflex

In laboratory confirmation of a B-thalassemia trait diagnosis, Hgb A2 levels should be considered in conjunction with family history plus laboratory data including serum iron and iron binding capacity, red cell morphology, hemoglobin, hematocrit and mean corpuscular volume (MCV).

Please note that patients with the combination of iron deficiency and B-thalassemia may have normal A2 level. An elevated A2 level cannot be used to screen for B-thalassemia in these cases.

Patient State	HbA2 Level	HbF Level
Heterozygous B-thalassemia	4-9%	1-5 %
Homozygous B-thalassemia	Normal or increased	80-100 %
Heterozygous HPFH	Less than 1.5 %	10-20 %
Homozygous HPFH	Absent	100 %

* Abnormal, # = Corrected, C = Critical, f = Footnote, H = High, L = Low, t = Interpretive Text, @ = Reference Lab