

**TEST CHANGE**

**Hemoglobin Evaluation Reflexive Cascade**

2005792, HB CASCADE

**Specimen Requirements:**

**Patient Preparation:**

**Collect:** Lavender (~~K 2 EDTA~~~~K2EDTA~~) or pink (~~K 2 EDTA~~~~Pink (K2EDTA)~~).

**Specimen Preparation:** Transport ~~5mL~~~~5-mL~~ whole blood. (Min: ~~3~~ mL)

**Transport Temperature:** Refrigerated. Separate specimens must be submitted when multiple tests are ordered.

**Unacceptable Conditions:**

**Remarks:** Patient history form, including information from a recent CBC, is required for interpretation.

**Stability:** Ambient: Unacceptable; Refrigerated: 1 week; Frozen: Unacceptable

**Methodology:** High Performance Liquid Chromatography (HPLC)/~~Capillary~~ Electrophoresis/RBC Solubility/Polymerase Chain Reaction (~~PCR~~)/~~Fluorescence Resonance Energy Transfer (FRET)~~/Sequencing/Massively Parallel Sequencing

**Performed:** Sun-Sat

**Reported:** Varies

**Note:** The Hemoglobin Evaluation Reflexive Cascade begins with HPLC analysis. If an abnormal hemoglobin is detected or if the CBC data is suggestive of a hemoglobinopathy, appropriate testing will be performed at an additional charge. Depending on findings, one or more reflexive tests may be required in order to provide a clinical interpretation. Tests added may include electrophoresis, solubility testing, mutational analysis and/or sequencing. Quantitation of hemoglobin by HPLC or electrophoresis is most definitive in individuals one year of age and older. If quantitation of hemoglobin was performed before one year of age, repeat testing is recommended. Abnormal hemoglobin variants may require additional testing, which increases TAT up to 21 days.

**CPT Codes:** 83021. If reflexed additional CPT codes may apply; refer to the reflexed test code for applicable codes.

New York DOH Approval Status: Specimens from New York clients will be sent out to a New York DOH approved laboratory, if possible.

**Interpretive Data:**

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.

**Reference Interval:**

Effective August 19, 2013

HPLC testing Age-Defined Normal Hemoglobin Reference Intervals							
Age	Hb A Percent	Hb A2 Percent	Hb F Percent	Hb S Percent	Hb C Percent	Hb E Percent	Hb Other Percent
0-1 month	7.6-54.8	0.0-1.4	45.8-91.7	0.0	0.0	0.0	0.0
2 months	14.7-70.1	0.0-2.0	32.7-85.2	0.0	0.0	0.0	0.0
3 months	26.6-81.8	0.1-2.6	14.5-73.7	0.0	0.0	0.0	0.0
4 months	43.0-89.5	0.8-3.0	4.2-56.9	0.0	0.0	0.0	0.0
5 months	60.8-94.0	1.5-3.3	1.0-38.1	0.0	0.0	0.0	0.0
6-8 months	78.2-96.6	1.8-3.5	0.9-19.4	0.0	0.0	0.0	0.0
9-12 months	86.1-97.2	1.9-3.5	0.6-11.6	0.0	0.0	0.0	0.0
13-23 months	85.1-97.7	1.9-3.5	0.0-8.5	0.0	0.0	0.0	0.0
2 years and older	95.0-97.9	2.0-3.5	0.0-2.1	0.0	0.0	0.0	0.0