ARUP LABORATORIES | *A nonprofit enterprise of the University of Utah and its Department of Pathology*

Effective Date: April 20, 2026

TEST CHANGE

Hemoglobin Evaluation Reflexive Cascade

2005792, HB CASCADE

Specimen Requirements:	
Patient Preparation:	
Collect:	Lavender (K2EDTA~~K 2 EDTA~~) or pink (K2EDTA~~K 2 EDTA~~).
Specimen Preparation:	Transport 5mL whole blood in original tube.~~.~~ (Min: 3 mL) Also acceptable: whole blood in an ARUP standard transport tube.
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
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.~~	

Deleted Cells

Deleted Cells

Reference Interval:

~~Effective August 19, 2013~~

<table>
<tr><th>Test Number</th><th>Components</th><th>Reference Interval</th></tr>
<tr><td></td><td>Hemoglobin - Other</td><td>0.0%</td></tr>
<tr><td></td><td>Hemoglobin A</td><td></td></tr>
<tr><td></td><td></td><td><table>
<tr><th>Age</th><th>Reference Intervals (%)</th></tr>
<tr><td>0 - 1 month</td><td>7.6 - 54.8</td></tr>
<tr><td>2 months</td><td>14.7 - 70.1</td></tr>
<tr><td>3 months</td><td>26.6 - 81.8</td></tr>
<tr><td>4 months</td><td>43.0 - 89.5</td></tr>
<tr><td>5 months</td><td>60.8 - 94.0</td></tr>
<tr><td>6 - 8 months</td><td>78.2 - 96.6</td></tr>
<tr><td>9 - 12 months</td><td>86.1 - 97.2</td></tr>
<tr><td>13 - 23 months</td><td>85.1 - 97.7</td></tr>
<tr><td>2 years and older</td><td>95.0 - 97.9</td></tr>
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<tr><td></td><td>Hemoglobin A2</td><td></td></tr>
<tr><td></td><td></td><td><table>
<tr><th>Age</th><th>Reference Intervals (%)</th></tr>
<tr><td>0 - 1 month</td><td>0.0 - 1.4</td></tr>
<tr><td>2 months</td><td>0.0 - 2.0</td></tr>
<tr><td>3 months</td><td>0.1 - 2.6</td></tr>
<tr><td>4 months</td><td>0.8 - 3.0</td></tr>
<tr><td>5 months</td><td>1.5 - 3.3</td></tr>
<tr><td>6 - 8 months</td><td>1.8 - 3.5</td></tr>
<tr><td>9 - 12 months</td><td>1.9 - 3.5</td></tr>
<tr><td>13 - 23 months</td><td>1.9 - 3.5</td></tr>
<tr><td>2 years and older</td><td>2.0 - 3.5</td></tr>
</table></td></tr>
<tr><td></td><td>Hemoglobin C</td><td>0.0%</td></tr>
<tr><td></td><td>Hemoglobin E</td><td>0.0%</td></tr>
<tr><td></td><td>Hemoglobin F</td><td></td></tr>
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		Age	Reference Intervals (%)
		0 - 1 month	45.8 - 91.7
		2 months	32.7 - 85.2
		3 months	14.5 - 73.7
		4 months	4.2 - 56.9
		5 months	1.0 - 38.1
		6 - 8 months	0.9 - 19.4
		9 - 12 months	0.6 - 11.6
		13 - 23 months	0.0 - 8.5
		2 years and older	0.0 - 2.1
	Hemoglobin S	0.0%	