

**TEST CHANGE**

**Hemoglobin Evaluation by HPLC With Reflex to Electrophoresis and/or RBC Solubility  
3017101, HGBEL RFX**

**Specimen Requirements:**

**Patient Preparation:**

**Collect:** Lavender (EDTA) or pink (K2EDTA).

**Specimen Preparation:** Transport 5 mL whole blood in original tube. (Min: 0.5 mL) Also acceptable: whole blood in an ARUP standard transport tube.

**Transport Temperature:** Refrigerated

**Unacceptable Conditions:** Frozen or room temperature specimens.

**Remarks:**

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

**Methodology:** High Performance Liquid Chromatography (HPLC) / Capillary Electrophoresis / RBC Solubility

**Note:**

If abnormal peaks suggestive of a hemoglobin variant are detected, then RBC solubility and/or capillary electrophoresis will be performed to aid in confirmation and identification of the variant. Additional charges apply.

If a hemoglobin variant cannot be quantitated by HPLC, results from capillary electrophoresis will be reported.

Quantitation of hemoglobin is recommended for a definitive diagnosis in infants 1 year and older.

**CPT Codes:** 83021; if reflexed, add 83020; 85660

**New York DOH Approval Status:** This test is New York DOH approved.

**Interpretive Data:**

**Hemoglobin Evaluation:**

**HPLC Report: Results from HPLC are reported.**

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

**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: 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.

Reference Interval:

Test Number	Components	Reference Interval	
	Hemoglobin A		
		Age	Reference Intervals (%)
		0-1 months	7.6-54.8
		2 months	14.7-70.1
		3 months	26.6-81.8
		4 months	43.0-89.5
		5 months	60.8-94.0
		6-8 months	78.2-96.6
		9-12 months	86.1-97.2
		13-23 months	85.1-97.7
		2 years and older	95.0-97.9
	Hemoglobin A2		
		Age	Reference Intervals (%)
		0-1 months	0.0-1.4
		2 months	0.0-2.0
		3 months	0.1-2.6
		4 months	0.8-3.0
		5 months	1.5-3.3
		6-8 months	1.8-3.5
		9-23 months	1.9-3.5
		2 years and older	2.0-3.5
	Hemoglobin C	0.0	
	Hemoglobin E	0.0	
	Hemoglobin F		
		Age	Reference Intervals (%)
		0-1 months	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 Other	0.0	
	Hemoglobin S	0.0	

