
Lab Dept: Chemistry

Test Name: METHEMOGLOBIN

General Information

Lab Order Codes: MHGB

Synonyms: N/A

CPT Codes: 83050 – Hemoglobin; methemoglobin, quantitative

Test Includes: Methemoglobin concentration reported in per cent.

Logistics

Test Indications: When the iron in hemoglobin is oxidized to the trivalent state, the resulting brownish pigment is methemoglobin. This form of hemoglobin cannot bind to oxygen.

Lab Testing Sections: Chemistry

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 1 hour

Special Instructions: See [Container](#) for special container recommendations. See [Collection](#) for special draw requirements.

Specimen

Specimen Type: Whole blood

Container: **Preferred:** Sims Portex® syringe (PB151) or Smooth-E syringe (956-463) **Accepted:** Radiometer Balanced Heparin Capillary gas tubes

Draw Volume: 0.4 mL (Minimum: 0.2 mL syringe, MIN: 0.07 mL capillary, STP: 0.1 mL capillary) blood

Processed Volume: 0.2 mL syringe blood, MIN: 0.07 mL capillary blood, STP: 0.1 mL capillary blood

Collection:	Routine venipuncture using one of the collection containers listed above. Immediately remove all air from syringe, remove needle, cap tightly, and mix. Send in original tube. Forward promptly. Do not expose specimen to air.
Special Processing:	Lab Staff: Deliver the Methemoglobin syringe/cap gas tube immediately to the lab testing station. Specimen should be analyzed within 1 hour of collection or stored on ice if testing is delayed.
Patient Preparation:	None
Sample Rejection:	Mislabeled or unlabelled specimens; samples containing air; samples collected in containers not recommended; specimens older than 1 hour; clotted samples

Interpretive

Reference Range:	0.0 - 1.5%
Critical Values:	N/A
Limitations:	This method may not detect M-hemoglobins.
Methodology:	Oximetry
References:	ABL 800 Flex Operator's Manual, Software Version 6.14, Publication 201410, Edition E, Code 994-909 ABL90 FLEX Operator's Manual from software version 3.1xx, Code 995-656
Updates:	6/11/2018: Updated references