MAYO CLINIC LABORATORIES

Test Definition: HBEL0

Hb Electrophoresis Summary Interp

Overview

Useful For

Incorporating and summarizing results into an overall evaluation with consultative interpretation on the HBEL1 / Hemoglobin Electrophoresis Evaluation, Blood

Testing Algorithm

This test is an additional consultative interpretation that summarizes all testing as well as any pertinent clinical information available for review, and will be provided after all reflexed tests have been completed. If performed, subsequent molecular results will also be incorporated into the overall evaluation. One or more of the following molecular tests may be reflexed on the HBEL1 / Hemoglobin Electrophoresis Evaluation, Blood:

-ATHAL / Alpha-Globin Gene Analysis, Varies

-WASQR / Alpha-Globin Gene Sequencing, Blood

-WBSQR / Beta-Globin Gene Sequencing, Blood

-WBDDR / Beta-Globin Cluster Locus Deletion/Duplication, Blood

-WGSQR / Gamma-Globin Full Gene Sequencing, Varies

This summary is in addition to interpretations that may be provided for each component.

Method Name

Only orderable as a reflex. For more information see HBEL1 / Hemoglobin Electrophoresis Evaluation, Blood.

Medical Interpretation.

NY State Available

Yes

Specimen

Specimen Type

Whole Blood EDTA

Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Whole Blood EDTA	Refrigerated (preferred)		

Clinical & Interpretive

Clinical Information

The evaluation of hemoglobin disorders can be very complex. This can involve abnormalities in the alpha, beta, delta, or gamma chains. Molecular testing is performed to fully evaluate complex situations. A summary interpretation that incorporates all of the testing performed is beneficial to the ordering physician.

Reference Values

Only orderable as a reflex. For more information see HBEL1 / Hemoglobin Electrophoresis Evaluation, Blood.

An interpretive report will be provided.

Interpretation

An interpretive report will be provided that summarizes all testing as well as any pertinent clinical information.

Cautions

No significant cautionary statements.

Clinical Reference

1. Hoyer JD, Hoffman DR: The thalassemia and hemoglobinopathy syndromes. In: McClatchey KD, ed. Clinical Laboratory Medicine. 2nd ed. Lippincott Williams and Wilkins; 2002:866-895

2. Harteveld CL, Higgs DR: Alpha-thalassemia. Orphanet J Rare Dis. 2010;5:13

3. Thein SL: The molecular basis of beta-thalassemia. Cold Spring Harb Persepct Med. 2013;1;3(5):a011700

4. Crowley MA, Mollan TL, Abdulmalik OY, et al: A hemoglobin variant associated with neonatal cyanosis and anemia. N Engl J Med. 2011;364:1837-1843

5. Kipp BR, Roellinger SE, Lundquist PA, et al: Development and clinical implementation of a combination deletion PCR and multiplex ligation-dependent probe amplification assay for detecting deletions involving the human alpha-globin gene cluster. J Mol Diagn. 2011 Sep;13(5):549-557. doi: 10.1016/j.jmoldx.2011.04.001

6. Hein MS, Oliveira JL, Swanson KC, et al: Large deletions involving the beta globin gene complex: genotype-phenotype correlation of 119 cases. Blood. 2015;126:3374

Performance

Method Description
A hematopathologist evaluates all of the testing performed and a summary interpretive report is added.

PDF Report
No

Specimen Retention Time

Performing Laboratory Location
Rochester

Fees & Codes

Test Classification
Not Applicable

CPT Code Information
83020-26

LOINC® Information

Test ID	Test Order Name	Order LOINC Value
HBEL0	Hb Electrophoresis Summary Interp	In Process

Result ID	Reporting Name	LOINC®
608091	Hb Electrophoresis Summary Interp	13514-5
608117	Reviewed By	18771-6