

# **Test Definition: NHEM**

Hereditary Erythrocytosis Focused Gene Panel, Next-Generation Sequencing, Varies

Reporting Title: Erythrocytosis Focused Panel, NGS

Performing Location: Rochester

#### **Ordering Guidance:**

Polycythemia vera and acquired causes of erythrocytosis should be excluded before ordering this evaluation.

For a complete evaluation including hemoglobin electrophoresis testing and hereditary erythrocytosis variant analysis of the most common gene regions associated with hereditary erythrocytosis in an algorithmic fashion, order REVE2 / Erythrocytosis Evaluation, Blood. See <a href="Erythrocytosis Genotyping Comparison Chart">Erythrocytosis Genotyping Comparison Chart</a> for a comparison of erythrocytosis testing options.

The hemoglobin genes, HBA1/HBA2 and HBB, are not interrogated in this assay.

Multiple gene panels are available. For more information see NHEP and Subpanel Comparison Gene List.

Customization of this panel and single gene analysis for any gene present on this panel are available. For more information see CGPH / Custom Gene Panel, Hereditary, Next-Generation Sequencing, Varies.

Targeted testing for familial variants (also called site-specific or known variants testing) is available for the genes on this panel. See FMTT / Familial Variant, Targeted Testing, Varies. To obtain more information about this testing option, call 800-533-1710.

#### **Shipping Instructions:**

Specimen preferred to arrive within 96 hours of collection.

#### **Necessary Information:**

- 1. <u>Erythrocytosis Patient Information</u> is required. Testing may proceed without the patient information, however, the information aids in providing a more thorough interpretation. Ordering providers are strongly encouraged to fill out the form and send with the specimen.
- 2. If form not provided, include the following information with the test request: clinical diagnosis, pertinent clinical history (ie, complete blood cell count results and relevant clinical notes), and differentials based on clinical presentation and/or laboratory findings.

#### Specimen Requirements:

Submit only 1 of the following specimens:

Specimen Type: Whole blood

**Patient Preparation:** A previous bone marrow transplant from an allogenic donor will interfere with whole blood testing. Call 800-533-1710 for instructions for testing patients who have received a bone marrow transplant.

Container/Tube:

Preferred: Lavender top (EDTA)
Acceptable: Yellow top (ACD)
Specimen Volume: 3 mL
Collection Instructions:

1. Invert several times to mix blood.



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2. Send whole blood specimen in original tube. Do not aliquot.

Specimen Stability Information: Ambient (preferred) 4 days/Refrigerated

Specimen Type: Skin biopsy

**Supplies**: Fibroblast Biopsy Transport Media (T115)

Container/Tube: Sterile container with any standard cell culture media (eg, minimal essential media, RPMI 1640). The

solution should be supplemented with 1% penicillin and streptomycin.

Specimen Volume: 4-mm punch

Specimen Stability Information: Refrigerated (preferred)/Ambient

Additional Information: A separate culture charge will be assessed under CULFB / Fibroblast Culture for Biochemical or

Molecular Testing. An additional 3 to 4 weeks is required to culture fibroblasts before genetic testing can occur.

Specimen Type: Cultured fibroblast

Container/Tube: T-25 flask Specimen Volume: 2 Flasks

**Collection Instructions**: Submit confluent cultured fibroblast cells from a skin biopsy from another laboratory. Cultured

cells from a prenatal specimen will not be accepted.

Specimen Stability Information: Ambient (preferred)/Refrigerated (<24 hours)

**Additional Information:** A separate culture charge will be assessed under CULFB / Fibroblast Culture for Biochemical or Molecular Testing. An additional 3 to 4 weeks is required to culture fibroblasts before genetic testing can occur.

#### Forms:

- 1. Erythrocytosis Patient Information (T694) is required.
- **2. New York Clients-Informed consent is required.** Document on the request form or electronic order that a copy is on file. The following documents are available:
- -Informed Consent for Genetic Testing (T576)
- -Informed Consent for Genetic Testing (Spanish) (T826)
- 3. If not ordering electronically, complete, print, and send a Benign Hematology Test Request (T755) with the specimen.

Specimen Type	Temperature	Time	Special Container
Varies	Varies		

#### **Result Codes:**

Result ID	Reporting Name	Туре	Unit	LOINC®
618992	Test Description	Alphanumeric		62364-5
618993	Specimen	Alphanumeric		31208-2
618994	Source	Alphanumeric		31208-2
618995	Result Summary	Alphanumeric		50397-9
618996	Result	Alphanumeric		82939-0
618997	Interpretation	Alphanumeric		59465-5
618998	Additional Results	Alphanumeric		82939-0
618999	Resources	Alphanumeric		99622-3



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619000	Additional Information	Alphanumeric	48767-8
619001	Method	Alphanumeric	85069-3
619002	Genes Analyzed	Alphanumeric	82939-0
619003	Disclaimer	Alphanumeric	62364-5
619004	Released By	Alphanumeric	18771-6

LOINC® and CPT codes are provided by the performing laboratory.

## **Supplemental Report:**

Supplemental

### **CPT Code Information:**

81404

81479

81479 (if appropriate for government payers)

#### **Reflex Tests:**

Test Id	Reporting Name	CPT Units	CPT Code	Always Performed	Available Separately
CULFB	Fibroblast Culture for Genetic Test	1	88233	No	Yes

## **Result Codes for Reflex Tests:**

Test ID	Result ID	Reporting Name	Туре	Unit	LOINC®
CULFB	52327	Result Summary	Alphanumeric		50397-9
CULFB	52329	Interpretation	Alphanumeric		69965-2
CULFB	52328	Result	Alphanumeric		82939-0
CULFB	CG770	Reason for Referral	Alphanumeric		42349-1
CULFB	CG899	Specimen	Alphanumeric		31208-2
CULFB	52331	Source	Alphanumeric		31208-2
CULFB	52332	Method	Alphanumeric		85069-3
CULFB	54625	Additional Information	Alphanumeric		48767-8
CULFB	52333	Released By	Alphanumeric		18771-6

#### **Reference Values:**

An interpretive report will be provided.