

Reporting Title: Erythrocytosis Evaluation

Performing Location: Mayo Clinic Laboratories - Rochester Main Campus

Ordering Guidance:

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

Necessary Information:

Send the following information with the specimen:

- Recent transfusion information
- Most recent complete blood cell count (CBC) results and serum erythropoietin (EPO) levels, if known

[Hereditary Erythrocytosis Patient Information \(T810\)](#) is strongly recommended and should include clinical and family history, CBC results, EPO levels, and *JAK2* testing results, if known. Testing may proceed without this information; however, it allows for a more complete interpretation.

Specimen Requirements:

Container/Tube:

Preferred: Lavender top (EDTA)

Acceptable: Yellow top (ACD solution B)

Specimen Volume: 5 mL

Collection Instructions: Send whole blood specimen in original tube. **Do not aliquot.**

Forms:

1. **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 \(T826\)](#)

2. [Hereditary Erythrocytosis Patient Information](#)

3. If not ordering electronically, complete, print, and send a [Benign Hematology Test Request \(T755\)](#) with the specimen.

| Specimen Type | Temperature | Time | Special Container |
|------------------|--------------|--------|-------------------|
| Whole Blood EDTA | Refrigerated | 7 days | |

Result Codes:

| Result ID | Reporting Name | Type | Unit | LOINC® |
|-----------|----------------------------|--------------|------|-----------------|
| 60286 | Hb Variant by Mass Spec, B | Alphanumeric | | No LOINC Needed |
| 41927 | Hb A | Numeric | % | 20572-4 |
| 41928 | Hb F | Numeric | % | 32682-7 |
| 41929 | Hb A2 | Numeric | % | 4552-6 |
| 41930 | Variant 1 | Alphanumeric | % | 24469-9 |
| 41931 | Variant 2 | Alphanumeric | % | 24469-9 |
| 41932 | Variant 3 | Alphanumeric | % | 24469-9 |
| 41933 | HGBCE Interpretation | Alphanumeric | | 78748-1 |
| 65615 | HPLC Hb Variant, B | Alphanumeric | | No LOINC Needed |

| | | | | |
|--------|-------------------------------|--------------|--|---------|
| 608426 | Erythrocytosis Interpretation | Alphanumeric | | 59466-3 |
| 608440 | Reviewed By | Alphanumeric | | 18771-6 |

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

Supplemental Report:

No

Components:

| Test Id | Reporting Name | CPT Units | CPT Code | Always Performed | Available Separately |
|---------|-------------------------------------|-----------|----------|------------------|----------------------|
| REVEI | Erythrocytosis Interpretation | 1 | 83020 | Yes | No |
| HGBCE | Hb Variant, A2 and F Quantitation,B | 1 | 83020 | Yes | Yes |
| HPLC | HPLC Hb Variant, B | 1 | 83021 | Yes | No |
| MASS | Hb Variant by Mass Spec, B | 1 | 83789 | Yes | No |

CPT Code Information:

83020-26

83020

83021

83789

83068 (if appropriate)

82664 (if appropriate)

88184 (if appropriate)

Reflex Tests:

| Test Id | Reporting Name | CPT Units | CPT Code | Always Performed | Available Separately |
|---------|-------------------------------------|-----------|----------|------------------|----------------------|
| SDEX | Sickle Solubility, B | 1 | 85660 | No | Yes |
| IEF | Isoelectric Focusing, B | 1 | 82664 | No | No |
| UNHB | Hb Stability, B | 1 | 83068 | No | No |
| HPFH | Hb F Distribution, B | 1 | 88184 | No | No |
| WASQR | Alpha Globin Gene Sequencing, B | 1 | 81259 | No | Yes, (Order WASEQ) |
| WBSQR | Beta Globin Gene Sequencing, B | 1 | 81364 | No | Yes, (Order WBSEQ) |
| WGSQR | Gamma Globin Full Gene Sequencing | 1 | 81479 | No | Yes, (Order WGSEQ) |
| REVE0 | Erythrocytosis Summary Interp | | | No | No |
| WAGDR | Alpha Globin Clustr Locus Del/Dup,B | 1 | 81269 | No | Yes, (Order AGDD) |
| WBGDR | Beta Globin Gene Cluster, Del/Dup,B | 1 | 81363 | No | Yes, (Order WBGDD) |
| NHEP | Erythrocytosis Full Panel, NGS | 1 | 81404 | No | Yes |

Result Codes for Reflex Tests:

| Test ID | Result ID | Reporting Name | Type | Unit | LOINC® |
|---------|-----------|----------------|------|------|--------|
|---------|-----------|----------------|------|------|--------|

| | | | | | |
|-------|--------|-------------------------------------|--------------|--|----------|
| IEF | 81644 | Isoelectric Focusing, B | Alphanumeric | | 49316-3 |
| SDEX | 9180 | Sickle Solubility, B | Alphanumeric | | 6864-3 |
| HPFH | 8270 | Hb F Distribution, B | Alphanumeric | | 4579-9 |
| HPFH | 2104 | Interpretation | Alphanumeric | | 59466-3 |
| UNHB | 9095 | Hb Stability, B | Alphanumeric | | 4639-1 |
| WASQR | 47952 | Alpha Globin Gene Sequencing Result | Alphanumeric | | 50397-9 |
| WASQR | 47953 | Interpretation | Alphanumeric | | 59466-3 |
| WBSQR | 47954 | Beta Globin Gene Sequencing Result | Alphanumeric | | 50397-9 |
| WBSQR | 47955 | Interpretation | Alphanumeric | | 59466-3 |
| WGSQR | 47950 | Gamma Globin Gene Sequencing Result | Alphanumeric | | 50397-9 |
| WGSQR | 47951 | Gamma Globin Interpretation | Alphanumeric | | 59466-3 |
| REVE0 | 608094 | Erythrocytosis Summary Interp | Alphanumeric | | 59465-5 |
| REVE0 | 608116 | Reviewed By | Alphanumeric | | 18771-6 |
| NHEP | 619020 | Test Description | Alphanumeric | | 62364-5 |
| NHEP | 619021 | Specimen | Alphanumeric | | 31208-2 |
| NHEP | 619022 | Source | Alphanumeric | | 31208-2 |
| NHEP | 619023 | Result Summary | Alphanumeric | | 50397-9 |
| NHEP | 619024 | Result | Alphanumeric | | 82939-0 |
| NHEP | 619025 | Interpretation | Alphanumeric | | 59465-5 |
| NHEP | 619026 | Additional Results | Alphanumeric | | 82939-0 |
| NHEP | 619027 | Resources | Alphanumeric | | 99622-3 |
| NHEP | 619028 | Additional Information | Alphanumeric | | 48767-8 |
| NHEP | 619029 | Method | Alphanumeric | | 85069-3 |
| NHEP | 619030 | Genes Analyzed | Alphanumeric | | 82939-0 |
| NHEP | 619031 | Disclaimer | Alphanumeric | | 62364-5 |
| NHEP | 619032 | Released By | Alphanumeric | | 18771-6 |
| WBGDR | 620977 | Beta Globin Gene Cluster Del/Dup | Alphanumeric | | 101634-4 |
| WBGDR | 620978 | Reviewed by | Alphanumeric | | 18771-6 |
| WBGDR | 620976 | Interpretation | Alphanumeric | | 69047-9 |
| WAGDR | 621362 | Result Summary | Alphanumeric | | 50397-9 |
| WAGDR | 621363 | Result | Alphanumeric | | 82939-0 |
| WAGDR | 621364 | Interpretation | Alphanumeric | | 69047-9 |
| WAGDR | 621365 | Additional Information | Alphanumeric | | 48767-8 |
| WAGDR | 621366 | Specimen | Alphanumeric | | 31208-2 |
| WAGDR | 621367 | Source | Alphanumeric | | 31208-2 |
| WAGDR | 621368 | Method | Alphanumeric | | 85069-3 |
| WAGDR | 621804 | Disclaimer | Alphanumeric | | 62364-5 |
| WAGDR | 621369 | Released By | Alphanumeric | | 18771-6 |

Reference Values:

Definitive results and an interpretive report will be provided.