MAYO
Mayo Medical Laboratories
1-800-533-1710

NEW TEST ANNOUNCEMENT
NOTIFICATION DATE: November 6, 2012
EFFECTIVE DATE: November 12, 2012

CPOX Gene, Full Gene Analysis
Test ID: CPOXS

USEFUL FOR:
- Confirmation of hereditary coproporphyria (HCP) for patients with clinical features
- This test should be ordered only for individuals with symptoms suggestive of hereditary coproporphyria (HCP). Asymptomatic patients with a family history of HCP should not be tested until a mutation has been identified in an affected family member.

METHODOLOGY: Polymerase Chain Reaction (PCR) Amplification/DNA Sequencing

REFERENCE VALUES: An interpretive report will be provided

SPECIMEN REQUIREMENTS: **Specimen must arrive within 96 hours of collection.**

Submit only 1 of the following specimens:
Preferred:

Specimen Type: Blood
Container/Tube:
Preferred: Lavender top (EDTA) or yellow top (ACD)
Acceptable: Any anticoagulant
Specimen Volume: 3 mL
Collection Instructions:
1. Invert several times to mix blood.
2. Send specimen in original tube.
Specimen Stability Information: Ambient (preferred)/Refrigerated

Specimen Type: Cultured fibroblasts
Container/Tube: T-75 or T-25 flask
Specimen Volume: 1 full T-75 or 2 full T-25 flasks
Specimen Stability Information: Ambient (preferred)/Refrigerated <24 hours

Specimen Type: Skin biopsy
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. Tubes can be supplied upon request (Eagle's minimum essential medium with 1% penicillin and streptomycin [Supply T115]).
Specimen Volume: 4-mm punch
Specimen Stability Information: Refrigerated (preferred)/Ambient

Acceptable:

Specimen Type: Blood spot
Container/Tube: Whatman Protein Saver 903 Paper
Specimen Volume: 5 blood spots

Collection Instructions:

1. Let blood dry on the filter paper at ambient temperature in a horizontal position for 3 hours.
2. Do not expose specimen to heat or direct sunlight.
3. Do not stack wet specimens.
4. Keep specimen dry.

Specimen Stability Information: Ambient (preferred)/Refrigerated

NOTE:

- Molecular Genetics-Biochemical Disorders Patient Information Sheet (Supply T527).
- **New York Clients-Informed consent is required.** Please document on the request form or electronic order that a copy is on file. An Informed Consent for Genetic Testing (Supply T576) is available in Special Instructions.

SPECIMEN STABILITY INFORMATION:

Specimen Type	Temperature	Time
Varies	Varies	

CAUTIONS:

- A small percentage of individuals who are carriers, or have a diagnosis of, hereditary coproporphyria (HCP) may have a mutation that is not identified by this method (eg. large genomic deletions, promoter mutations). The absence of a mutation(s), therefore, does not eliminate the possibility of positive carrier status or the diagnosis of variegate. For carrier testing, it is important to first document the presence of a *CPOX* gene mutation in an affected family member.
- In some cases, DNA alterations of undetermined significance may be identified.
- Rare polymorphisms exist that could lead to false-negative or false-positive results. If results obtained do not match the clinical findings, additional testing should be considered.
- A previous bone marrow transplant from an allogenic donor will interfere with testing. Call Mayo Medical Laboratories for instructions for testing patients who have received a bone marrow transplant.
- Test results should be interpreted in the context of clinical findings, family history, and other laboratory data. Errors in our interpretation of results may occur if information given is inaccurate or incomplete.
- Mutations in other genes, such as *PPOX* and *HMBS* have been shown to cause other forms of porphyrias. Abnormalities in these genes are not detected by this assay.

FEE: Please contact your Regional Manager for your account's fee information.

CPT CODE:

"CPOX Gene, Full Gene Analysis"
83891-Isolation or extraction of highly purified nucleic acid
83898 x 8-Amplification, target, each nucleic acid sequence
83909 x 16-Separation and identification by high-resolution technique
83912-Interpretation and report

"Fibroblast Culture for Genetic Testing"
88233-Tissue culture, skin or solid tissue biopsy (if appropriate)
88240-Cryopreservation (if appropriate)

DAY(S) SET UP: Tuesday, 10 am **ANALYTIC TIME**: 14 days

QUESTIONS: Contact your Mayo Medical Laboratories' Regional Manager or
Marvin H. Anderson, Jr., MML Laboratory Technologist Resource Coordinator
Telephone: 800-533-1710