Lab Dept:	**Urine/Stool**
Test Name:	**PORPHOBILINOGEN, QUANTITATIVE, RANDOM, URINE**

General Information

Lab Order Codes:	PORR
Synonyms:	Hoesch Test
CPT Codes:	84110 – Porphobilinogen, urine; quantitative
Test Includes:	Urine porphobilinogen level reported in mcmol/L.

Logistics

Test Indications:	First-line testing for establishing a tentative diagnosis for acute neuropathic porphyria including acute intermittent porphyria, hereditary coproporphyria, and variegate porphyria.
Lab Testing Sections:	Urine/Stool - Sendouts
Referred to:	Mayo Medical Laboratories (Test# 82068/PBGU)
Phone Numbers:	MIN Lab: 612-813-6280 STP Lab: 651-220-6550
Test Availability:	Daily, 24 hours
Turnaround Time:	2 – 6 days, test set up Monday – Friday
Special Instructions:	Protect from light by wrapping in foil. Specimen should be frozen as soon as possible after collection.

Specimen

Specimen Type:	Urine, random collection
Container:	Plastic leakproof container (No preservatives)
Draw Volume:	Submit entire urine collection to the laboratory, wrap in foil.
Processed Volume:	20 mL (Minimum: 15 mL) urine

Collection:	A random urine sample may be obtained by voiding into a urine cup and is often performed at the laboratory. Bring the refrigerated container to the lab. Make sure all specimens submitted to the laboratory are properly labeled with the patient's name, medical record number and date of birth. Protect the specimen from light by wrapping in foil. Deliver to laboratory within 1 hour of collection.
Special Processing:	Lab Staff: Mix specimen well, remove aliquot into an amber, 60 mL urine bottle (Mayo Supply T596) to protect from light. Store and ship at frozen temperatures. Forward promptly.
Patient Preparation:	None
Sample Rejection:	Specimens other than urine; mislabeled or unlabeled specimens; warm specimens

Interpretive

Reference Range:	< or = 1.3 mcmol/L **Interpretation:** Abnormal results are reported with detailed interpretation including overview of the results and their significance, a correlation to available clinical information provided with the specimen, differential diagnosis, and recommendations for additional testing when indicated.
Critical Values:	N/A
Limitations:	Ideally, specimen collection should occur during the acute phase. Porphobilinogen (PGB) may be normal when the patient is not exhibiting symptoms. PBG is susceptible to degradation at high temperatures, at ph <5.0, and on prolonged exposure to light. Specimens should be frozen immediately following collection and protected from light. Urine and fecal pophyrin analysis should be performed to confirm the diagnosis and to distinguish between acute intermittent porphyria (AIP), hereditary coproporphyria (HCP), and variegate porphyria (VP). A biochemical diagnosis of AIP can be confirmed by measurement of PBG deaminase activity. VP and HCP can be confirmed by measurement of fecal porphyrins.
Methodology:	Liquid Chromatography – Tandem Mass Spectrometry (LC-MS/MS) Stable Isotope Dilution Analysis
References:	Mayo Medical Laboratories Web Page January 2013

Updates:	3/25/2004: Test moved from Fairview University Diagnostic Laboratories to Mayo Medical Laboratories. Note: Change from a qualitative to a quantitative test. CPT change. Reference range change and method change. 4/20/2010: Units change, previously reported at mg/g creatine.