Lab Dept: Chemistry

Test Name: GALACTOSE-1-PHOSPHATE (GAL-1-P), ERYTHROCYTES

General Information

Lab Order Codes: GAL1P

Synonyms: Galactosemia; GAL1P, RBCs

CPT Codes: 84378 – Sugars, single quantitative, each specimen

Test Includes: Galactose-1-Phosphate (GAL-1-P) level reported in mg/dL.

Logistics

Test Indications: Monitoring dietary therapy of patients with galactosemia due to deficiency of galactose-1-phosphate uridytransferase or uridine diphosphate galactose-4-epimerase.

This test is not appropriate for the diagnosis of galactosemia This test is also not appropriate for the diagnosis epimerase deficiency.

Lab Testing Sections: Chemistry - Sendouts

Referred to: Mayo Medical Laboratories (Mayo Test: GAL1P)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 8 - 15 days, performed weekly on Tuesdays

Special Instructions: See Patient Preparation

Specimen

Specimen Type: Whole blood

Container: Lavender (EDTA) tube
Alternate: Green top (NaHep) tube

Draw Volume: 3 mL (Minimum: 2 mL) blood
Processed Volume: Same as Draw Volume

Collection: Routine venipuncture

Special Processing: Lab Staff:
DO NOT centrifuge.
Specimen must remain as whole blood in original
collection container.

Store and ship at refrigerated
temperatures. Forward promptly.
Specimen is stable refrigerated for 72 hours.

Patient Preparation: For infants, collect the specimen immediately prior to feeding to avoid postprandial elevations. Specimens collected following a meal can exhibit postprandial elevations.

Sample Rejection: Mislabeled or unlabeled specimens; gross hemolysis

Interpretive

Reference Range: < or = 0.9 mg/dL

Therapeutic Range: < or = 4.9 mg/dL

Interpretation: The concentration of galactose-1-phosphate (Gal-1-P) is provided along with reference ranges for patients with galactosemia and normal controls. The recommended Gal-1-P goal for patients with galactosemia is < or = 4.9 mg/dL.

Critical Values: N/A

Limitations: Not a diagnostic test for galactosemia.

Methodology: Liquid Chromatography – Tandem Mass Spectrometry (LC-MS/MS)

References: Mayo Clinical Laboratories (October 2019)

Updates: 12/12/2016: Requires Sodium Heparin Green top tube.
10/1/19: Preferred tube EDTA whole blood. Washed cells no longer necessary. Updated method and reference ranges.