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**Lab Dept:** Chemistry

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

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***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.

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***Logistics***

**Test Indications:** Monitoring dietary therapy of patients with galactosemia due to deficiency of galactose-1-phosphate uridylyltransferase 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](#)

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***Specimen***

**Specimen Type:** Whole blood

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

**Draw Volume:** 3 mL (Minimum: 2 mL) blood

<b>Processed Volume:</b>	Same as Draw Volume
<b>Collection:</b>	Routine venipuncture
<b>Special Processing:</b>	Lab Staff: <b>DO NOT centrifuge.</b> 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.
<b>Patient Preparation:</b>	For infants, collect the specimen immediately prior to feeding to avoid postprandial elevations. Specimens collected following a meal can exhibit postprandial elevations.
<b>Sample Rejection:</b>	Mislabeled or unlabeled specimens; gross hemolysis

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### ***Interpretive***

<b>Reference Range:</b>	< 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.
<b>Critical Values:</b>	N/A
<b>Limitations:</b>	Not a diagnostic test for galactosemia.
<b>Methodology:</b>	Liquid Chromatography – Tandem Mass Spectrometry (LC-MS/MS)
<b>References:</b>	<a href="#">Mayo Clinical Laboratories</a> (October 2019)
<b>Updates:</b>	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.