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**Lab Dept:** Chemistry

**Test Name:** GALACTOSE-1-PHOSPHATE  
URIDYLTRANSFERASE

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***General Information***

**Lab Order Codes:** G1PH

**Synonyms:** GPUT; GALT

**CPT Codes:** 82775 – Galactose-1-phosphate uridyl transferase; quantitative

**Test Includes:** Galactose-1-phosphate uridyl transferase level reported as nmol/h/mg of hemoglobin.

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***Logistics***

**Test Indications:** Diagnosis of galactose-1-phosphate uridyltransferase deficiency, the most common cause of galactosemia. Confirmation of abnormal state newborn screening results.

**Lab Testing Sections:** Chemistry - Sendouts

**Referred to:** Mayo Medical Laboratories (Mayo Test: GALT)

**Phone Numbers:** MIN Lab: 612-813-6280

STP Lab: 651-220-6550

**Test Availability:** Daily, 24 hours

**Turnaround Time:** 3 – 4 days; test set up Monday, Wednesday, Friday

**Special Instructions:** Biochemical Genetics Request Form (Supply T439) is required.

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***Specimen***

**Specimen Type:** Whole blood

**Container:** Lavender top (EDTA) tube

**Draw Volume:** 5 mL (Minimum: 2 mL) blood

**Processed Volume:** Same as Draw Volume

<b>Collection:</b>	Routine venipuncture
<b>Special Processing:</b>	Lab Staff: Do Not centrifuge. Specimen should remain in original collection tube. Store and ship at refrigerated temperatures. Include Patient History for Galactosemia Form. Specimen must not be frozen. Forward promptly.
<b>Patient Preparation:</b>	None
<b>Sample Rejection:</b>	Specimens other than whole blood, anticoagulants other than EDTA; Heparin or ACD, gross hemolysis; frozen specimens; mislabeled or unlabeled specimens

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### ***Interpretive***

<b>Reference Range:</b>	≥24.5 nmol/h/mg Hb An interpretive report will be provided.
<b>Critical Values:</b>	N/A
<b>Limitations:</b>	This assay is not useful for monitoring of dietary compliance by galactosemics.  This assay will not detect galactokinase deficiency or uridine diphosphate galactose 4-epimerase deficiency.
<b>Methodology:</b>	Enzyme reaction followed by Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS)
<b>References:</b>	<a href="#">Mayo Medical Laboratories</a> Web Page (April 2014)
<b>Updates:</b>	11/21/2006: MML has removed the upper normal range value for this test. The reference range previously was stated as 18.5-28.5 U/g of hemoglobin. 2/14/2014: Test down at MML, temporary move to ARUP. 4/28/2014: Test back up at MML with new method, previously listed as enzymatic. Please note new reference range.