
Lab Dept: Chemistry

Test Name: UDP-GALACTOSE 4' EPIMERASE (GALE),
BLOOD

General Information

Lab Order Codes: GALE

Synonyms: Galactosemia; Uridine diphosphate galactose-4-epimerase

CPT Codes: 82759 – Galactokinase, RBC

Test Includes: UDP-Galactose 4' epimerase level reported in nmol/h/mg of hemoglobin.

Logistics

Test Indications: Diagnosis UDP-galactose 4' epimerase deficiency.

Lab Testing Sections: Chemistry - Sendouts

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

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 Wednesdays

Special Instructions: N/A

Specimen

Specimen Type: Whole blood

Container: Lavender top (EDTA) tube
Alternate: Green top (NaHep), Green top (LiHep) or Yellow top (ACD) tube

Draw Volume: 4 mL (Minimum: 2 mL) blood

Processed Volume: Same as Draw Volume

Collection:	Routine venipuncture
Special Processing:	Lab Staff: Do Not centrifuge. Specimen should remain in original collection tube. Store and ship at refrigerated temperatures. Forward promptly.
Patient Preparation:	None
Sample Rejection:	Mislabeled or unlabeled specimens; gross hemolysis

Interpretive

Reference Range: ≥ 0.7 nmol/h/mg

An interpretive report will be provided.

Critical Values: N/A

Limitations: This assay is not useful for monitoring dietary compliance. See Galactose-1-Phosphate, Erythrocytes

This assay will not detect epimerase (GALE) deficiency or galactose-1-phosphate uridylyltransferase (GALT) deficiency.

It is important to notify the laboratory if the patient has been transfused prior to specimen collection. The results of testing performed in erythrocytes are invalid following a transfusion, including analysis of enzymes, biochemical phenotyping, or galactose-1-phosphate.

The most common cause of galactosemia is GALT. In most cases, GALT deficiency should be ruled out prior to evaluating for GALK deficiency.

Methodology: Enzyme Reaction followed by Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS)

References: [Mayo Medical Laboratories](#) Web Page (November 2016)