
Lab Dept: Chemistry

Test Name: LITHIUM LEVEL

General Information

Lab Order Codes: LI (Mayo), LIT (MedTox for STAT availability)

Synonyms: Li, Eskalith®, Lithobid®

CPT Codes: 80178 - Lithium

Test Includes: Lithium level reported in mmol/L (Mayo) and mEq/L (MedTox).

Logistics

Test Indications: Monitoring therapy of patients with bipolar disorders, including recurrent episodes of mania and depression.

Lab Testing Sections: Chemistry - Sendouts

Referred to: Mayo Medical Laboratories (MML Test: LITH)
MedTox Laboratories (for Stat availability)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 1 day

Stat testing referred to MedTox

Special Instructions: **Do not** use Lithium Heparin tube.

If this is a STAT order, please check with the provider to see if the specimen should be shipped immediately and performed STAT by the reference lab at an additional cost. If immediate shipment is necessary, please call the lab to make arrangements.

Specimen

Specimen Type: Blood

Container: Red NO GEL tube

Draw Volume:	1.5 mL (Minimum: 0.75 mL) blood
Processed Volume:	0.5 mL (Minimum: 0.25 mL) serum
Collection:	Routine venipuncture
Special Processing:	Lab Staff: Centrifuge specimen, remove serum aliquot into a screw-capped round bottom plastic vial. Store and ship at refrigerated temperatures. Forward promptly.
Patient Preparation:	None
Sample Rejection:	Lithium heparin tube; gross hemolysis; gross lipemia; grossly icteric; mislabeled or unlabeled specimens

Interpretive

Reference Range:	Mayo: 0.5 – 1.2 mmol/L (Trough concentration – therapeutic concentration) MedTox: 0.6 – 1.2 mEq/L
Critical Values:	Mayo: >1.6 mmol/L MedTox: 1.5 mEq/L
Limitations:	N/A
Methodology:	Mayo: Colorimetric MedTox: Inductively Coupled Plasma/Mass Spectrometry (ICP-MS)
References:	Mayo Medical Laboratories Web Site (November 2017) MedTox, Inc (November 2017)
Updates:	3/1/2004: Test moved from MedTox Laboratories to Mayo Medical Laboratories. Note: Change in lower end of reference range from 0.6 to 0.8 mEq/L. 7/7/2006: Units updated to mmol/L, previously listed as mEq/L for MML. 10/25/2012: Toxic concentration previously listed as >1.5 mmol/L. 6/26/2015: Method and ref range update at MML. 11/8/2017: Red NO GEL tube necessary to satisfy either ref lab