**Lab Dept:** Chemistry  
**Test Name:** LAMOTRIGINE LEVEL

### General Information

**Lab Order Codes:** LAMO  
**Synonyms:** Lamictal  
**CPT Codes:** 80175 – Lamotrigine  
**Test Includes:** Lamictal level reported in ug/mL.

### Logistics

**Test Indications:** Monitoring serum concentration of lamictal (lamotrigine), assessing compliance or adjusting lamotrigine dose in patients receiving other anticonvulsant drugs which interact pharmokinetically with lamictal (lamotrigine).

**Lab Testing Sections:** Chemistry – St. Paul  
**Phone Numbers:**  
- MIN Lab: 612-813-6280  
- STP Lab: 651-220-6550

**Test Availability:** Daily, 24 hours  
**Turnaround Time:** 4 hours, test performed daily  
**Special Instructions:** 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 top NO GEL tube  
Alternate: Green top NO GEL (Lithium Heparin) tube

**Draw Volume:** 0.6 mL blood  
**Processed Volume:** 0.2 plasma/serum
Collection: Routine venipuncture

Special Processing: Lab Staff: Centrifuge specimen, remove aliquot into a screw-capped round bottom plastic vial. Store and ship at refrigerated temperatures. Forward promptly.

Patient Preparation: None

Sample Rejection: Mislabeled or unlabeled specimens; sample clotted; collected in a gel tube

Interpretive

Reference Range: 2 – 20 ug/mL

Note: Current clinical information suggests the recommended concentrations for lamotrigine during chronic therapy are 2 - 20 ug/mL.

Critical Values: N/A

Limitations: Reporting Limit: 0.85 ug/mL

Methodology: Immunoassay

References:
ARK™, Lamotrigine Assay package insert, ARK Diagnostics, Inc, 1190 Bordeaux Drive, Sunnyvale, CA 94089 USA, Printed in USA, Revised October 2010, 1600-0179-00 Rev 02

ARK™, Lamotrigine Calibrator package insert, ARK Diagnostics, Inc, 1190 Bordeaux Drive, Sunnyvale, CA 94089 USA, Printed in USA, Revised October 2010, 1600-0179-00 Rev 02

ARK™, Lamotrigine Control package insert, ARK Diagnostics, Inc, 1190 Bordeaux Drive, Sunnyvale, CA 94089 USA, Printed in USA, Revised October 2010, 1600-0179-00 Rev 02

Making Sense of Lamotrigine Serum Levels (May 2005) Bassel W Abou-Khalil, MD, American Epilepsy Society, Epiepsy Currents, v.5(3), PMC1198624
