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**Lab Dept:** Chemistry

**Test Name:** ETHOSUXIMIDE LEVEL

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***General Information***

**Lab Order Codes:** ZAR

**Synonyms:** Zarontin®

**CPT Codes:** 80168 - Ethosuximide

**Test Includes:** Ethosuximide level reported in mcg/mL.

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***Logistics***

**Test Indications:** Monitoring therapy, determining compliance, assessing toxicity

**Lab Testing Sections:** Chemistry - Sendouts

**Referred to:** MedTox Laboratories (MedTox Test: 48)

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

STP Lab: 651-220-6550

**Test Availability:** Daily, 24 hours

**Turnaround Time:** 1 day, test performed daily

**Special Instructions:** Trough levels are most reproducible.

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***Specimen***

**Specimen Type:** Blood

**Container:** Red NO GEL top tube  
Alternate: Green top NO GEL (Lithium heparin) tube

**Draw Volume:** 3 mL (Minimum: 1.2 mL) blood

**Processed Volume:** 1 mL (Minimum: 0.4 mL) serum/plasma

**Collection:** Routine venipuncture

**Special Processing:** Lab Staff: Centrifuge specimen, remove plasma aliquot into a screw-capped round bottom plastic vial within 2 hours of draw. Store and ship at refrigerated temperatures. Forward promptly.

Minimum volumes may result in an elevated reporting limit and inability to repeat analysis.

**Patient Preparation:** None

**Sample Rejection:** Gross hemolysis; mislabeled or unlabeled specimens

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### ***Interpretive***

**Reference Range:** Therapeutic range: 40 – 100 mcg/mL

**Toxic Values:** > or = 150 mcg/mL

**Limitations:** Minimum volumes may result in an elevated reporting limit and inability to repeat analysis. Reporting limit 1.0 mcg/mL.

**Methodology:** Immunoassay Technique (IA)

**References:** [MedTox Laboratories](#) July 2012

**Updates:** 3/4/2004: Test moved from Medtox to Mayo Medical Laboratories. Note: Change in upper therapeutic range from 100 to 75. Toxic range previously >150.  
1/28/2010: Units changed from ug/mL to mcg/mL. Critical/Toxic value changed from  $\geq 100$  mcg/mL to >100 mcg/mL.  
1/5/2011: Test moved from Mayo to MedTox. Toxic range previously listed >100 mcg/mL.  
11/16/2016: Tube update to NO GEL.