Lab Dept: Chemistry

Test Name: MEXILETINE LEVEL

General Information

Lab Order Codes: MEX

Synonyms: Mexitil®

CPT Codes: 80375 – Drug, definitive, qualitative or quantitative, nos; 1-3
OR
G0480 – Drug, test, definitive (if appropriate)

Test Includes: Mexiletime concentration measured in mcg/mL.

Logistics

Test Indications: Useful for assessing achievement of optimal therapeutic concentrations and assessing potential toxicity.

Lab Testing Sections: Chemistry - Sendouts

Referred to: Mayo Medical Laboratories (MML Test: MEX)

Phone Numbers: MIN Lab: 612-813-6280
STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 1 – 3 days, performed Monday, Wednesday and Friday

Special Instructions: See Patient Preparation.

Specimen

Specimen Type: Blood

Container: Red top NO GEL

Draw Volume: 9 mL (Minimum: 3.3 mL) blood

Processed Volume: 3 mL (Minimum: 1.1 mL) serum

Collection: Routine venipuncture
**Special Processing:**
Lab Staff: Centrifuge specimen, remove serum aliquot into a screw-capped round bottom vial. Note whether specimen is serum. Store and ship at refrigerated temperatures. Forward promptly.

**Patient Preparation:**
Draw blood after patient has been receiving mexiletine for at least 3 days and just before administration of the next dose.

**Sample Rejection:**
Gross hemolysis; gross lipemia; grossly icteric; mislabeled or unlabeled specimens; specimens collected in gel tubes

### Interpretive

**Reference Range:**
Therapeutic range: 0.80 – 2.0 mcg/mL (trough value)

**Critical Values:**
Toxic concentration: >2.0 mcg/mL (trough value)

**Limitations:**
N/A

**Methodology:**
High Performance Liquid Chromatography (HPLC)

**References:**
[Mayo Medical Laboratory](https://mayo.edu) December 2017

**Updates:**
12/12/2011: Plasma is no longer an acceptable specimen type. Units update from ug/mL to mcg/mL.
2/4/2016: CPT update