
Lab Dept: Chemistry

Test Name: TEGRETOL EPOXIDE LEVEL

General Information

Lab Order Codes: EPOX

Synonyms: Carbamazepine-10,11-Epoxyde, Tegretol®, Epoxyde, CBZ

CPT Codes: 80156 – Carbamezepine, total

Test Includes: Carbamazepine and Carbamazepine-10,11 Epoxyde levels reported in ug/mL.

Logistics

Test Indications: Antiepileptic (Anticonvulsant) therapeutic drug monitoring

Lab Testing Sections: Chemistry - Sendouts

Referred to: MedTox Laboratories (MedTox Test: 150)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 1 day

Special Instructions: Trough levels are most reproducible.

Specimen

Specimen Type: Blood

Container: Red top NO GEL tube
Alternate: Green top NO GEL tube

Draw Volume: 6 mL (Minimum: 0.6 mL) blood

Processed Volume: 2 mL (Minimum: 0.2 mL) serum/plasma

Note: Submission of the minimum volume results in an elevated reporting limit and inability to repeat analysis.

Collection:	Routine venipuncture
Special Processing:	Lab Staff: Centrifuge specimen, remove serum/plasma 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

Interpretive

Reference Range:	Carbamazepine:	4.0 – 12.0 ug/mL
	Carbamazepine-10,11-Epoxyde:	0.4 – 4.0 ug/mL
Critical Values:	Carbamazepine:	>20.0 ug/mL
	Carbamazepine-10,11-Epoxyde:	>10.0 ug/mL
Limitations:	Carbamazepine:	0.5 ug/mL reporting limit
	Carbamazepine 10, 11-Epoxyde:	0.2 ug/mL reporting limit

Methodology: Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS)

References: [MedTox Laboratories](#) December 2017

Updates:
 1/7/2015: CPT update
 11/4/2016: Tube update
 12/19/2017: Critical value update. Carb previously >15 and Epoxyde >7.
 Method update.