

Notification Date: June 17, 2025 Effective Date: July 24, 2025

Butabarbital, Serum

Test ID: BTBAS

Useful for:

Monitoring of butabarbital therapy

Methods:

Gas Chromatography Mass Spectrometry (GC-MS)

Reference Values:

Therapeutic range: 2.0-3.0 mcg/mL Hypnosis 25 mcg/mL Sedation/Sleep >30 mcg/mL Coma

Toxic concentration: >50 mcg/mL

Cutoff concentrations by gas chromatography mass spectrometry:

Butabarbital: 0.5 ng/mL

Specimen Requirements:

Supplies: Sarstedt Aliquot Tube, 5 mL (T914)

Collection Container/Tube: Red top (serum gel/SST are not acceptable)

Submission Container/Tube: Plastic vial

Specimen Volume: 1.5 mL

Collection Instructions: 1. Draw blood immediately before the next scheduled dose.

2. Within 2 hours of collection, centrifuge and aliquot serum into a plastic vial.

Minimum Volume: 0.6 mL

Specimen Stability Information:

Specimen Type	Temperature	Time
Serum Red	Refrigerated (preferred)	28 days
	Ambient	28 days
	Frozen	28 days

Cautions:

The concentration at which toxicity occurs varies, and results should be interpreted in light of the clinical situation.

Specimens collected in serum gel tubes are not acceptable because the drug can absorb on the gel and lead to falsely decreased concentrations.

CPT Code:

80299

Day(s) Performed: Thursday Report Available: 3 to 9 days

Questions

Contact Mayo Clinic Laboratories, Laboratory Resource Coordinator at 800-533-1710.