

# Carbamazepine (Tegretol)

**CPT Code:** 80156

**Order Code:** 18949

**ABN Requirement:** No

**Alternative Name(s):** Epitol, Tegretol, Atretol, Equetro, Carbatrol, Total  
**Specimen:**

**Preferred:** Serum

**Alternative:** EDTA Plasma

**Volume:** 1.0 mL

**Minimum Volume:** 0.5 mL

**Container:**

**Preferred:** Red Top Tube (no gel barrier)

**Alternative:** Lavender Top Tube (EDTA)

**Collection:**

**Serum:**

1. Collect and label sample according to standard protocols.
2. Gently invert tube 5 times immediately after draw. Do not shake.
3. Allow blood to clot 30 minutes.
4. Centrifuge specimen for 10 minutes.
5. Aliquot serum into transport tube labeled as "Red Top Serum" and cap tightly. Discard original tube.

**EDTA Plasma:**

1. Collect and label sample according to standard protocols.
2. Gently invert tube 10 times immediately after draw. Do not shake.
3. Centrifuge specimen for 10 minutes.
4. Aliquot plasma into transport tube labeled as "EDTA Plasma" and cap tightly. Discard original tube.

**Patient Instructions:** Collect as a **trough** just prior to next dose.

**Transport:** Store serum or EDTA plasma at 2°C to 8°C after collection and ship the same day per packaging instructions included with the provided shipping box.

**Stability:**

**Ambient (15-25°C):** 14 days

**Refrigerated (2-8°C):** 14 days

**Frozen (-20°C):** 10 months

**Causes for Rejection:** Specimens other than serum or EDTA plasma; improper labeling; samples not stored properly; samples older than stability limits; serum separator tube (SST)

**Methodology:** Chromatography/Mass Spectrometry

**Turn Around Time:** 3 to 4 days

**Reference Range:**

| Age | Reference Range (mcg/mL) |
|-----|--------------------------|
| All | 4.0-12.0                 |

**Priority Values:**

| Age | Priority 1 Value (mcg/mL) |
|-----|---------------------------|
| All | ≥20.0                     |

**Clinical Significance:** Carbamazepine and its metabolite, (10,11-Carbamazepine epoxide), are widely used for control of generalized tonic-clonic, partial-onset, complex and mixed seizure disorders. The metabolism of carbamazepine in epileptic patients has several different pathways that can be altered when the patient is co-medicated with other anticonvulsants and, therefore, its therapeutic level should be monitored along with its metabolite in their free and protein bound states.

*The CPT codes provided are based on AMA guidelines and are for informational purposes only. CPT coding is the sole responsibility of the billing party. Please direct any questions regarding coding to the payer being billed.*