

LAB26 Gentamicin, Trough

BMC

Performing Location(s)

BMC

Specimen Type

Serum

Preferred Container

Red Top

Minimum Volume to Submit for Testing

0.5 mL Serum

Multiple test can be performed from this volume.

For question please contact the lab at 547-3975.

Storage Requirements

Sample tubes should be centrifuged within 2 hour of collection followed by transfer of the serum to a labeled plastic, aliquot tube.

See Causes of Rejection for temperature requirements.

Transportation Needs

Deliver specimen to laboratory within 1 hour of collection if unspun.

If not possible see "Storage Requirements".

Causes for Rejection

Mislabeled or unlabeled specimen

Less than 50% draw for vacutainer tubes

Anything other than a red top tube

> 6 weeks refrigerated

> 24 hours room temperature

> 6 months frozen

Hemolysis > 800 mg/dL HgB

Lipemia > 750 mg/dL Trig

Bilirubin > 30 mg/dL Bili

Reference Values

Level	Units	Therapeutic Range	High Critical Value
Random	ug/mL	2.0 - 8.0	>18.0
Peak	ug/mL	4.0 - 8.0	>18.0
Trough	ug/mL	0.5-2.0	>2.0

Therapeutic gentamicin concentrations vary significantly depending on the individual patient. A range of 4.0-8.0 µg/mL [8.64-17.28 µmol/L] for peak drug levels indicates effective plasma or serum levels for many patients; however, some individuals are best treated at concentrations outside this range. Although it has not yet been established exactly what specimen concentration is toxic, minimal values in excess of 2 µg/mL [4.32 µmol/L] for longer than 10 days have been associated with toxicity.

Available STAT

Yes

Methodology

Beckman AU/Dx Series

CPT Code

80170