

## LAB27 Gentamicin, Random

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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