
Lab Dept: Chemistry

Test Name: GENTAMICIN LEVEL, SERUM/PLASMA

General Information

Lab Order Codes: GENT

Synonyms: Garamycin®

CPT Codes: 80170 – Gentamicin

Test Includes: Gentamicin concentration in ug/mL

Logistics

Test Indications: Useful in monitoring therapeutic dosage and is affective against gram-negative bacteria.

Lab Testing Sections: Chemistry

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 2 hours

Special Instructions: A peak level should be drawn 30-60 minutes after infusion. A trough level should be drawn just before the next dose

Specimen

Specimen Type: Blood

Container: Green top (Li Heparin) tube **preferred**
Alternate tube: Red, marble or gold top tube

Draw Volume: 0.6 mL blood

Processed Volume: 0.2 mL serum/plasma

Collection: Routine blood collection. Mix tubes containing anticoagulant by gentle inversion.

Special Processing: Lab Staff: Centrifuge specimen, remove serum/plasma aliquot into plastic sample cup. Store at refrigerated temperatures.

Patient Preparation: None

Sample Rejection: Mislabeled or unlabeled specimen

Interpretive

Reference Range:

Peak Levels	
Therapeutic concentration:	4 – 8 ug/mL
Trough Levels	
Therapeutic concentration:	<2 ug/mL generally indicates elimination of the drug

Critical Values: Toxic concentration peak: >10 ug/mL

Toxic concentration trough: >2 ug/mL for >10 days

Limitations: Aminoglycosides similar in structure may cross-react with this assay.

Methodology: Particle Enhanced Turbidimetric Inhibition Immunoassay (Petinia)

References: Siemens Dimension Vista GENT Flex™ reagent Instructions for Use, Siemens Healthcare Diagnostics PN 781012.001 Rev D, Issue date 11/5/2012

Siemens Clinical Chemistry System GENT Flex™ reagent Instructions for Use, Siemens Healthcare Diagnostics, 717012.001 – US, Rev F, Issue date 3/3/2008

Siemens Dimension Vista GENT Drug 2 Cal Instructions for Use, Siemens Healthcare Diagnostics, Issue date: May 6, 2014

Jacobs & DeMott Laboratory Test Handbook (2001) Lexi-Comp, Inc, Hudson, OH, 5th Edition, 2001

Biorad Liquichek Unassayed Chemistry Control Product Insert, Bio-Rad Laboratories, Irvine, CA 92618

Updates: 2/8/2016:Update alt tube types