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**Lab Dept:** Chemistry

**Test Name:** AMIKACIN LEVEL

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***General Information***

**Lab Order Codes:** AMIM

**Synonyms:** Amikin®

**CPT Codes:** 80150 - Amikacin

**Test Includes:** Amikacin level reported in mcg/mL.

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***Logistics***

**Test Indications:** Useful for therapeutic drug monitoring

**Lab Testing Sections:** Chemistry - Sendouts

**Referred to:** Mayo Medical Laboratories (Test: RAMIK)

**Phone Numbers:** MIN Lab: 612-813-6280

STP Lab: 651-220-6550

**Test Availability:** Daily, 24 hours

**Turnaround Time:** 1 - 2 days; test performed daily

**Special Instructions:** **Peak Level:** Draw 30 - 60 minutes after last dose

**Trough Level:** Draw immediately before next dose

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***Specimen***

**Specimen Type:** Blood

**Container:** SST (Gold, marble or red) tube

**Draw Volume:** 1.5 mL (Minimum: 1 mL) blood

**Processed Volume:** 0.5 mL (Minimum: 0.25 mL) serum

**Collection:** Routine venipuncture

|                             |   |
|-----------------------------|---|
| <b>Special Processing:</b>  | Lab Staff: Centrifuge specimen within 2 hours of collection, remove serum into a screw-capped round bottom plastic vial. Store and ship at refrigerated temperatures. Forward promptly. |
| <b>Patient Preparation:</b> | None  |
| <b>Sample Rejection:</b>    | Mislabeled or unlabeled specimen; specimens other than serum; gross hemolysis; gross lipemia; grossly icteric   |

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### ***Interpretive***

**Reference Range:** Therapeutic trough concentrations: <8 mcg/mL  
Therapeutic peak concentrations: 25.0 – 35.0 mcg/mL

**Critical Values:** Toxic peak: >40.0 mcg/mL  
Toxic trough: >10.0 mcg/mL

**Limitations:** N/A

**Methodology:** Kinetic interaction of microparticles in solution (KIMS)

**References:** [Mayo Medical Laboratories Web Page](#) (August 2013)

**Updates:** 1/28/2010: Plasma no longer accepted at MML. Units changed from ug to mcg. Trough range previously listed at 5 – 10 ug/mL.  
8/13/2013: Therapeutic peak range previously listed as 20-25 mcg/mL  
6/26/15: Method change, previously listed as Enzyme-Multiplied Immunoassay Technique (EMIT), storage update, previously frozen.  
12/12/2017: Updated collection container.