

# Amikacin

## General:

Amikacin belongs to aminoglycoside antibiotics and is a standby emergency anti-biotic for parenteral treatment of life-threatening septic infections in which other aminoglycosides are ineffective. It is used particularly in nosocomial infections, preferably in combination with  $\beta$ -lactam antibiotics. The therapeutical range is very small; binding to plasma proteins and CSF concentration is low. No metabolization is observed, the elimination occurs via kidney, the half-life is approx. 2.2-2.6 hours. Hemodialysis (not peritoneal dialysis) removes approx. 50% during 6-8 hours. Amikacin is, as with other aminoglycosides, nephrotoxic and irreversibly ototoxic (repeated monitoring of kidney function, drug level monitoring beginning from the 3<sup>rd</sup> day of treatment, nervus statoacusticus function monitoring).

Indication: Therapy monitoring

Material: 2 ml serum

Preanalytics: blood collection just before (trough level) and 30 - 60 min. after medication (peak level)

TAT: 3-7 days\*

Method: EIA

Units: mg/l

Ref.- range: trough 5.0-10.0, peak 20.0-25.0, toxic >35.0

For complete list of laboratory test offered at Freiburg Medical Laboratory, please visit <http://www.fml-dubai.com/parameter-listings/>