

Mitomycin C

Product Code: TC406

Product Description:

Molecular Weight: 334.33

Molecular Formula: $C_{15}H_{18}N_4O_4$

CAS No: 50-07-7

Synonym: Ametycine, Mutamycin, MMC, Mitocin-C

Mitomycin C is an alkaloid produced by *Streptomyces caepitosus*. It exhibits antimicrobial, anticancer and immunomodulatory effects on target cells.

Mitomycin C is effective against Gram positive as well as Gram negative bacteria. Mitomycin C exerts its effect by inhibiting DNA synthesis. It crosslinks DNA at guanine and adenine residues and disrupts base pairing. The cell cycle is blocked at the G2 phase.

Mitomycin C is used to inactivate mouse embryonic fibroblast that are used as feeder layers to promote growth and prevent differentiation of human embryonic stem cells.

Directions:

Preparation instructions:

Stock solutions of Mitomycin C can be prepared in water (0.5mg/ml) and sterilized by filtering through a sterile membrane filter of porosity 0.22 microns or less.

Quality Control:

Appearance

Blue-grey powder

Solubility

Clear bluish solution at 0.5mg/ml in water; soluble in ethanol (1mg/ml) and DMSO (15mg/ml)

Melting point

360°C

Assay

NLT 99%

Cell Culture Test

Passes

Storage and Shelf Life:

Store powder at 2-8°C.

Use before expiry date given on the product label.

Revision No.: 0 / 2015

Disclaimer:

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