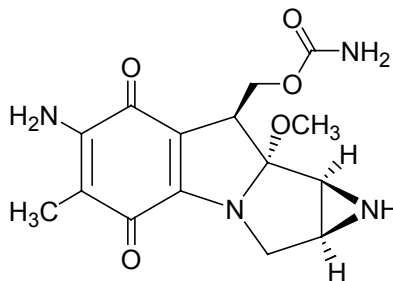


Mitomycin C

Code: **BIA-M1183**

Pack sizes: **5 mg, 25 mg**



Synonyms : **Mitomycin, Mitomycin S, Mitiromycin E, Ametycine, Mitocin C, Mutamycin, NSC 26980**

Specifications

CAS #	: 50-07-7
Molecular Formula	: C₁₅H₁₈N₄O₅
Molecular Weight	: 334.3
Source	: <i>Streptomyces</i> sp. MST-AS4067
Appearance	: Blue solid
Purity	: >98% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble methanol, DMF and DMSO. Moderately soluble in water.

Application Notes

Mitomycin C is the most studied of a family of highly distinctive blue/purple metabolites. The mitomycins are produced by several *Streptomyces* species. Mitomycin C exhibits potent antibacterial and antitumor activity and acts as an inhibitor of DNA synthesis by intercalation, blocking nuclear division with the induction of apoptosis in cancer cells.

References

1. Mitomycin, a new antibiotic from *Streptomyces*. I. Hata T. et al., *J. Antibiot.* **1956**, 9, 141.
2. DNA sequence specificity of mitomycin cross-linking. Teng S.P. et al., *Biochemistry* **1969**, 28, 3901.
3. Mitomycin C induces apoptosis in a caspases-dependent and Fas/CD95- independent manner in human gastric adenocarcinoma cells. Park I.C. et al., *Cancer Lett.* **2000**, 158, 125.
4. Activation of the S phase DNA damage checkpoint by mitomycin C. Mladenov E. et al., *J. Cell. Physiol.* **2007**, 211, 468.