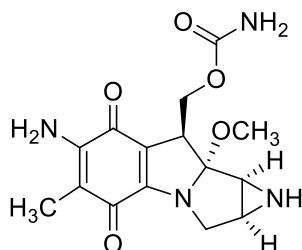


## Mitomycin C

Code No.: **BIA-M1183**

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



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

## Specifications

CAS #	: <b>50-07-7</b>
Molecular Formula	: <b>C<sub>15</sub>H<sub>18</sub>N<sub>4</sub>O<sub>5</sub></b>
Molecular Weight	: <b>334.3</b>
Source	: <b><i>Streptomyces</i> sp.</b>
Appearance	: <b>Blue solid</b>
Purity	: <b>&gt;95% by HPLC</b>
Long Term Storage	: <b>-20°C</b>
Solubility	: <b>Soluble in ethanol, methanol, DMF or DMSO. Moderate water solubility.</b>

## Application Notes

Mitomycin C is the most studied of a family of highly distinctive blue/purple metabolites produced by several *Streptomyces* species. Mitomycin C exhibits potent antibacterial and antitumor activity and inhibits 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.