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## **Product Information**

Product ID M3377 CAS No. 50-07-7

Chemical Name [1aS-(1aa,8B,8aa,8ba)]-6-Amino-8-[[aminocarbonyl)oxy]methyl]

-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5- methylazirino[2',3':3,4]

pyrrolo[1,2-a]indole-4,7-dione

Synonym MMC, Ametycine, Mitocin-C, Mutamycin

Formula C<sub>15</sub>H<sub>18</sub>N<sub>4</sub>O<sub>5</sub> Formula Wt. 334.33 Melting Point >360°C Purity ≥98%

Solubility Soluble in water (25 °C - 0.9

mg/mL), acetone, methanol, or ethanol (1 mg/mL), DMSO (15 mg/mL).

Store Temp -20°C

Ship Temp Ambient

0

## **Pricing and Availability**

Bulk quanitites available upon request

Product ID	Size	List Price
M3377	1 mg	\$41.40
M3377	5 mg	\$86.60
M3377	10 mg	\$148.70
M3377	25 mg	\$237.10

Description Mitomycin C is an alkaloid initially produced by Streptomyces that exhibits antibiotic, immunomodulatory, and anticancer chemotherapeutic activities. Mitomycin C increases heart allograft transplant survival rates by decreasing activation of CD4+ T cells and lymph nodes and increasing the number of circulating Treg cells. Mitomycin C inhibits thioredoxin reductase and induces DNA cross-linking at CpG sequences. Clinically, mitomycin C is used as a combination therapy to treat cancers; it suppresses cell growth by preventing DNA strand break repair. TEST!!!!!!

References Liu L, Wang F, Zheng Y, et al. Pretreatment of transfused donor splenocytes and allografts with mitomycin C attenuates acute rejection in heart transplantation in mice. Transplant Proc. 2014 May; 46(4):1169-74. PMID: 24815153.

> Paz MM, Zhang X, Lu J, et al. A new mechanism of action for the anticancer drug mitomycin C: mechanism-based inhibition of thioredoxin reductase. Chem Res Toxicol. 2012 Jul 16;25(7):1502-11. PMID: 22694104.

Kang YH, Lee KA, Kim JH, et al. Mitomycin C modulates DNA-double strand break repair genes in cervical carcinoma cells. Amino Acids. 2010 Nov;39(5):1291-8. PMID: 20352460.

Tomasz M. Mitomycin C: small, fast and deadly (but very selective). Chem Biol. 1995 Sep;2(9):575-9. PMID: 9383461.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.