



LKT Laboratories, Inc.

Mitomycin C

Phone: 888-558-5227

651-644-8424

Fax: 888-558-7329

Email: getinfo@lktlabs.com

Web: lktlabs.com

Product Information

Product ID M3377

CAS No. 50-07-7

Chemical Name [1aS-(1a α ,8B,8a α ,8b α)]-6-Amino-8-[[aminocarbonyloxy]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 C₁₅H₁₈N₄O₅

Formula Wt. 334.33

Melting Point >360°C

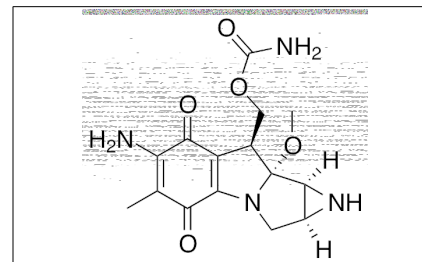
Purity ≥98%

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

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.



Bulk quantities available upon request

Product ID	Size
M3377	1 mg
M3377	5 mg
M3377	10 mg
M3377	25 mg

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.