

Hello Bio, Inc.
304 Wall St., Princeton, NJ 08540 USA

T. 609-683-7500
F. 609-228-4994

customercare-usa@hellobio.com



DATASHEET

Mitomycin C

Product overview

Name	Mitomycin C
Cat No	HB4458
Alternative names	Ametycine, MMC, NSC 26980
Applications	Cell Culture
Purity	>97%
Description	Antibiotic. DNA synthesis inhibitor.

Biological Data

Biological description	Inhibits proliferation of various cell types. Inhibits DNA synthesis by forming covalent crosslinks between complementary DNA strands. Widely used for treatment of feeder cell layers (e.g. for PMEF (primary mouse embryonic fibroblasts) and CD1 mouse embryonic fibroblasts (MEFs) and hESCs (human embryonic stem cells). Also shows antitumor activity.
-------------------------------	---

Solubility & Handling

Storage instructions	+4 °C
Solubility overview	Soluble in DMSO (100 mM) and water (5 mM)
Important	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

Chemical Data

Chemical name	[1aS-(1a α ,8 β ,8a α ,8b α)]-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
Molecular Weight	334.33
Chemical structure	
Molecular Formula	C ₁₅ H ₁₈ N ₄ O ₅
CAS Number	50-07-7
PubChem identifier	5746
SMILES	CC1=C(C(=O)C2=C(C1=O)N3C[C@H]4[C@@H]([C@@]3([C@@H]2COC(=O)N)OC)N4)N
InChiKey	NWIBSHFKIJFRCO-WUDYKRTCSA-N
MDL number	MFCD00078109
Appearance	Purple

References

Mitomycin C as an alternative to irradiation to inhibit the feeder layer growth in long-term culture assays.

Ponchio et al (2000) Cytotherapy 2(4)

PubMedID [12042037](#)

Isolation and structure of an intrastrand cross-link adduct of mitomycin C and DNA.

Bizanek et al (1992) Biochemistry 31(12)

PubMedID [1554696](#)

Isolation and structure of a covalent cross-link adduct between mitomycin C and DNA.

Tomasz et al (1987) Science 235(4793)

PubMedID [3103215](#)
