

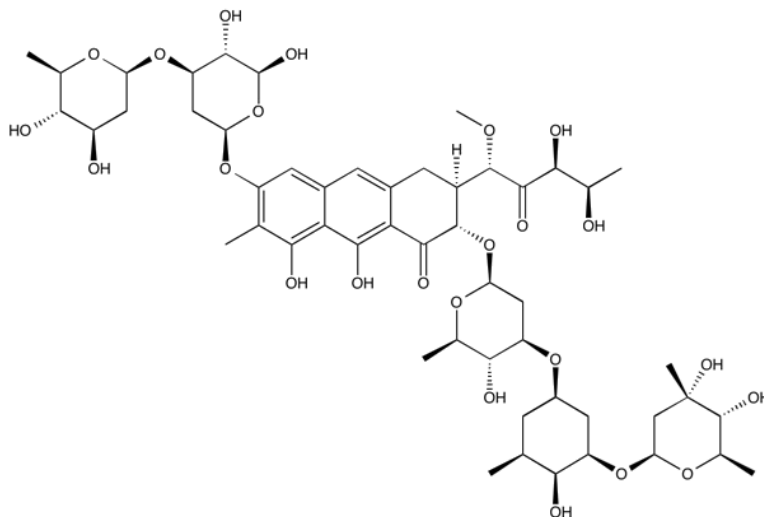
**Catalog # 10-2085**

**Mithramycin A**

CAS# 18378-89-7

A2371; Antibiotic LA 7017; Aureolic Acid; NSC 24559; PA 144; Plicamycin

Lot # X101415



Inhibits DNA methyl transferase.<sup>1</sup> A selective Sp1 inhibitor, it binds to GC rich DNA sequences, displacing Sp1 transcription factor binding to oncogene promoters, inhibiting their expression.<sup>2</sup> Mithramycin A (at 10-200 nM) sensitizes tumor cells to TRAIL-induced apoptosis.<sup>3</sup>

- 1) Lin *et al.* (2007), *Mithramycin A inhibits DNA methyltransferase and metastasis potential of lung cancer cells*; *Anticancer Drugs*, **18** 1157
- 2) Jia *et al.* (2010), *Combined treatment of pancreatic cancer cells with mithramycin A and tolfenamic acid promotes Sp1 degradation and synergistic anti-tumor activity*; *Cancer Res.*, **70** 1111
- 3) Lee *et al.* (2006), *Mithramycin A sensitizes cancer cells to TRAIL-mediated apoptosis by down-regulation of XIAP gene promoter through Sp1 sites*; *Mol. Cancer Ther.*, **5** 2737

**PHYSICAL DATA**

Molecular Weight:	1085.15
Molecular Formula:	C <sub>52</sub> H <sub>76</sub> O <sub>24</sub>
Purity:	98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (up to 20 mg/ml) or Ethanol (up to 10 mg/ml)
Physical Description:	Yellow solid
Storage and Stability:	Store as supplied, desiccated at -20°C for up to 1 year from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 1 month.

**Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.**