

## Catalog # 10-2085 Mithramycin A

CAS# 18378-89-7

A2371; Antibiotic LA 7017; Aureolic Acid; NSC 24559; PA 144; Plicamycin Lot # X101413

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

- 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.

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