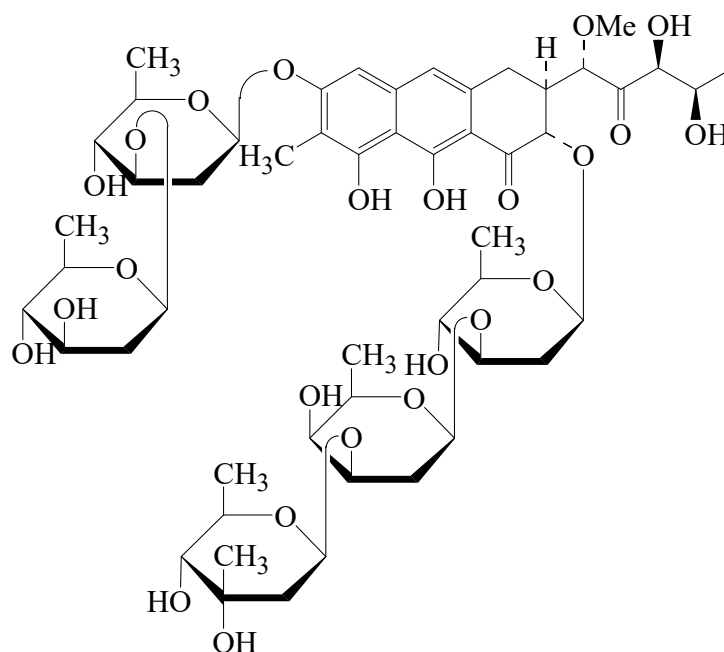




>>Entry Name: **Mithramycin**, 9CI, 8CI

Synonym(s): Aureolic acid. Mithracin. **Plicamycin**, BAN, INN, USAN. Mithramycin A. Mitramycin. A 2371. LA 7017. NSC 24559. PA 144. Antibiotic A 2371. Antibiotic LA 7017. Antibiotic PA 144



CAS Registry Number: 18378-89-7

Molecular Formula: C₅₂H₇₆O₂₄

Molecular Weight: 1085.158

Accurate Mass: 1084.47266

Percentage Composition: C 57.56%; H 7.06%; O 35.39%

Biological Source: Isol. from *Streptomyces argillaceus* and *Streptomyces tanashiensis*

Biological Use/Importance: Antineoplastic agent with hypocalcaemic props.

Physical Description: Yellow cryst. (Me₂CO)

Melting Point: Mp 180-183°

Optical Rotation: [α]_D²⁰ -56.5 (c, 0.2 in MeOH)

Calculated Log P Data: Log P -4.23 (uncertain value) (calc)

UV: [neutral] λ_{max} 228 (ϵ 26000); 280 (ϵ 51000); 318 (ϵ 10400); 332 (ϵ 8040); 415 (ϵ 11800) (MeOH) (Derep)

Other Data: Of limited clinical use because of toxicity. Mithramycin B and Mithramycin C also isol. but not elucidated

Hazard & Toxicity: Adverse effects reported when used therapeutically incl. thrombocytopenia, gastrointestinal disturbances, rashes, CNS, renal and hepatic toxicity. LD₅₀ (mus, orl) 500 mg/kg. Exp. reprod. effects

Aldrich: 28993-0

Fluka: 69823

Sigma: M3891

>>Derivative: Per-Ac

Melting Point: Mp 220-222°

Optical Rotation: [α]_D -30

References:

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