**Product datasheet**

**Mithramycin A (Plicamycin), DNA and RNA polymerase inhibitor. DNA binding transcriptional inhibitor. ab142723**

### References

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### Overview

**Product name**

Mithramycin A (Plicamycin), DNA and RNA polymerase inhibitor. DNA binding transcriptional inhibitor.

**Description**

DNA and RNA polymerase inhibitor. DNA binding transcriptional inhibitor.

**Biological description**

DNA and RNA polymerase inhibitor, DNA binding transcriptional inhibitor (Sp1 and Sp3). Shows antineoplastic activity.

**Purity**

> 97%

**CAS Number**

18378-89-7

**Chemical structure**

![Chemical structure of Mithramycin A](image)

### Properties

**Chemical name**

2-{[4-{[4,5-Dihydroxy-4,6-dimethyloxan-2-yl]oxy-5-hydroxy-6-methyloxan-2-yl]oxy-5-hydroxy-6-methyloxan-2-yl]oxy-3-(3,4-dihydroxy-1-methoxy-2-oxopentyl)-6-[4-(4,5-dihydroxy-6-methyloxan-2-yl)oxy-5-hydroxy-6-methyloxan-2-yl]oxy-8,9-dihydroxy-7-methyl-3,4-dihydro-2H-anthracen-1-one

**Molecular weight**

1084.47

**Molecular formula**

C_{52}H_{76}O_{24}

**PubChem identifier**

163659

**Storage instructions**

Store at +4°C. The product can be stored for up to 12 months.

**Solubility overview**

Soluble in ethanol
Handling

Wherever possible, you should prepare and use solutions on the same day. However, if you need
to make up stock solutions in advance, we recommend that you store the solution as aliquots in
tightly sealed vials at -20°C. Generally, these will be usable for up to one month. Before use, and
prior to opening the vial we recommend that you allow your product to equilibrate to room
temperature for at least 1 hour.

Need more advice on solubility, usage and handling? Please visit our frequently asked questions
(FAQ) page for more details.

SMILES

C[C@@H]1[C@@H][C@@H](O1)O[C@@H]2C[C@@H]3(C@H)4=CC5=C(C(=O)[C@H](C)O)O6=C[C@H]4(C=CC5=CC6=C(C(=O)[C@H](C)O)O)O[C@H]7C[C@@H]6(C@H)5(C@H)4(C=CC3=CC4=C(C(=O)[C@@H](C)O)O)O[C@H]8C[C@@H]7(C@H)(O8)C)O[C@H](C=4C(=C3C)O)O)O

Source

Synthetic

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES, NOT FOR USE IN HUMANS"

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