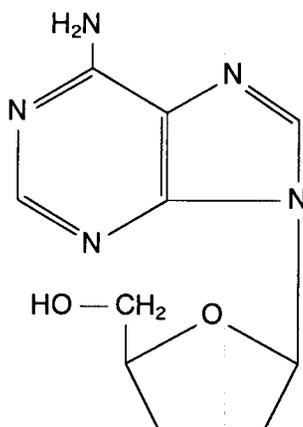


DIDEOXYADENOSINE

NSC - 98700



Chemical Name: 2',3'-Dideoxyadenosine

Other Name: DDA

CAS Registry Number: 4097-22-7

Molecular Formula: $C_{10}H_{13}N_5O_2$

M.W.: 235.2

Approximate Solubility:	(mg/mL)
H ₂ O	3.4-5.1
Buffer, pH4	4.8-9.6
Buffer, pH9	3.2-4.8
EtOH	1.6-2.0
DMA	2.6-3.4
DMSO	3.3-5.0
CHCl ₃	< 0.7
EtOAc	< 0.7
t-BuOH	< 0.7

Stability:

Bulk:

2',3'-Dideoxyadenosine is stable as a bulk chemical for at least 6 weeks at room temperature and 45 °C, under light or dark conditions.

Solution:

DDA was stable as a 0.1 mg/mL water solution for at least 23 hrs at room temperature.

Ultraviolet Absorption:

(water)

λ_{\max}	ϵ
260 \pm 2 nm	14,500 \pm 500
208 \pm 2 nm	19,500 \pm 700

High Performance Liquid Chromatography:

Column: IBM C₈, 250 x 4.5 mm i.d.

Mobile Phase: 8% CH₃CN in 0.05M NH₄H₂PO₄

Flow Rate: 1 mL/min

Detection: UV at 254 nm

Sample Preparation: 1 mg/10 mL of internal standard solution. Sonicate samples 10 minutes before injection.

Internal Standard: Approx. 4 mg orcinol/mL in MeOH/H₂O (50:50).

Retention Volume: 9.5 mL (NSC 98700)
18.3 mL (I.S.)

Optical Rotation:

(c = 1, H₂O)

$$[\alpha]_D^{25} = -28 \pm 2^\circ$$

Toxicity Data:

Mouse(po): LD₅₀: 5 gm/kg
Antimicrobial Agents & Chemotherapy, 19,424,(1981)

Mouse(sc): LD₅₀: 1320 mg/kg
Antimicrobial Agents & Chemotherapy, 19,424,(1981)