

Product Name: Decitabine

Catalog No.: 2624

Batch No.: 2

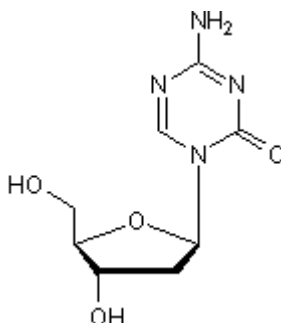
CAS Number: 2353-33-5

EC Number: 219-089-4

IUPAC Name: 4-Amino-1-(2-deoxy-β-D-erythro-pentofuranosyl)-1,3,5-triazin-2(1H)-one

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₈H₁₂N₄O₄
Batch Molecular Weight: 228.21
Physical Appearance: White solid
Solubility: water to 50 mM
DMSO to 50 mM
ethanol to 5 mM
Storage: Store at +4°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 100% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Optical Rotation: [α]_D = +72 (Concentration = 0.5, Solvent = Water)
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	42.1	5.3	24.55
Found	42.19	5.31	24.45

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

Product Name: Decitabine

Catalog No.: 2624

Batch No.: 2

CAS Number: 2353-33-5

EC Number: 219-089-4

IUPAC Name: 4-Amino-1-(2-deoxy-β-D-erythro-pentofuranosyl)-1,3,5-triazin-2(1H)-one

Description:

Cytosine analog that once incorporated into DNA acts as a suicide substrate for DNA methyltransferase. Inhibits DNA methyltransferase and results in DNA hypomethylation and activation of silent genes. Chemotherapeutic agent; suppresses growth of human tumor cell lines. Demethylates differentiation-related genes; reverses embryonic stem cell differentiation.

Physical and Chemical Properties:

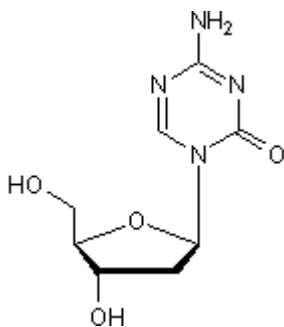
Batch Molecular Formula: C₈H₁₂N₄O₄

Batch Molecular Weight: 228.21

Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:



Storage: Store at +4°C

Solubility & Usage Info:

water to 50 mM

DMSO to 50 mM

ethanol to 5 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Jackson-Grusby *et al* (1997) Mutagenicity of 5-aza-2'-deoxycytidine is mediated by the mammalian DNA methyltransferase. *Proc.Natl.Acad.Sci.USA* **94** 4681.

Bender *et al* (1998) Inhibition of DNA methylation by 5-aza-2'-deoxycytidine suppresses the growth of human tumour cell lines. *Cancer Res.* **58** 95. PMID: 9426064.

Momparler (2005) Pharmacology of 5-aza-2'-deoxycytidine (decitabine). *Semin.Hematol.* **42** (Suppl 2) S9. PMID: 16015507.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

Tocris Bioscience is an R&D Systems company
USA & CANADA Tel: (800) 343-7475 EUROPE Tel: +44 (0)1235 529449 CHINA Tel: +86 (21) 52380373
www.RnDSystems.com

R&D
SYSTEMS®