



Product Specification Sheet

Product Name: Decitabine

Catalog Number: C3324

Technical information:

Chemical Formula: $C_8H_{12}N_4O_4$

CAS #: 2353-33-5

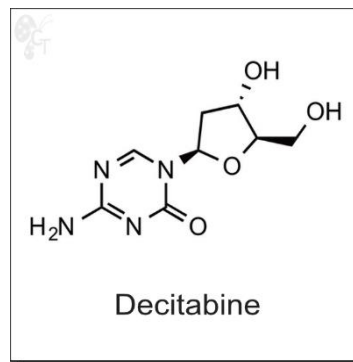
Molecular Weight: 228.21

Purity: > 98%

Appearance: White solid

Solubility: Soluble in DMSO up to 100 mM

Chemical Name: 4-amino-1-((2R,4S,5R)-4-hydroxy-5-(hydroxymethyl)-tetrahydrofuran-2-yl)-1,3,5-triazin-2(1H)-one



Storage: For longer shelf life, store solid powder or DMSO solution at -20°C desiccated.

Shelf Life: In the unopened package, powder is stable for 1 year and DMSO solution is stable for 6 months under proper storage condition.

- Handling:**
- To make 10 mM stock solution, add 0.438mL of DMSO for each mg of Decitabine.
 - For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

Biological Activity: Decitabine is a cytosine nucleoside analog that acts as a potent inhibitor of DNA methylation. Decitabine can be incorporated into DNA and inhibits further DNA methylation and induce apoptosis and senescence in leukemic cells. [1]

In a panel of primary (acute myeloid leukemia) AML cultures, Decitabine significantly inhibited proliferation and reduced cell viability with IC50 10-60 nM. [2]

Decitabine shows activity in a broad range of hematologic disorders. Currently, Decitabine is being studied in a Phase III clinical trials in patients with myelodysplastic syndrome (MDS) [3] and in a Phase II clinical trials in patients with AML [4].

- Reference:**
1. Decitabine is a cytosine nucleoside analog that acts as a potent inhibitor of DNA methylation. Decitabine can be incorporated into DNA and inhibits further DNA methylation and induce apoptosis and senescence in leukemic cells. [1]
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Decitabine shows activity in a broad range of hematologic disorders. Decitabine has been approved for treatment of myelodysplastic syndrome (MDS) [3] and is in a Phase II clinical trial in patients with acute myelogenous leukemia (AML). [4]
Pubmed ID: 21044612
 2. Leonard SM, et al. Sequential treatment with cytarabine and decitabine has an increased anti-leukemia effect compared to cytarabine alone in xenograft models of childhood acute myeloid leukemia. PLoS One. 2014; 9(1):e87475 Pubmed ID: 24489920
 3. <http://www.fda.gov/AboutFDA/CentersOffices/OfficeofMedicalProductsandTobacco/CDER/ucm095652.htm>
Pubmed ID: NCT02214407
 4. <https://clinicaltrials.gov/show/NCT02472145> Pubmed ID: NCT02472145

To reorder: <http://www.cellagentech.com/Decitabine/>

For Technical Support: technical@cellagentech.com

Chemicals are sold for research use only, not for clinical or diagnostic use.