Overview

| Product Name | Decitabine Small Molecule |
| :--- | :--- |
| Unit Size | 50 mg |
| Description | DNA hypomethylation agent |
| Purity | $>98 \%$ (TLC), NMR conforms |

## Technical Data

| Alternative Name(s) | 5-Aza-2'-deoxycytidine; NSC-127716, 2'-Deoxy-5-azacytidine; 4-Amino-1-(2-deoxy- $\beta$-D-erythro-pento furanosyl)-1,3,5-triazin-2(1H)-one |
| :---: | :---: |
| Formula | C8H12N4O4 |
| CAS\# | 2353-33-5 |
| Molecular Weight | 228.2 |
| Chemical Structure |  |
| Solubility | Soluble in $25 \mathrm{mg} / \mathrm{mL}$ DMSO, $11 \mathrm{mg} / \mathrm{mL}$ Water or Ethanol |
| Source | Synthetic |
| Appearance | White Solid |
| Storage Conditions | $-20^{\circ} \mathrm{C}$; 1 year+ |
| Shipping Temperature | Shipped Ambient |
| SMILES | C1[C@@H](%5BC@H%5D(O%5BC@H%5D1N2C=NC(=NC2=O)N)CO)O |
| Research Area(s) | Epigenetics |

## Biological Description

Function

Product Citations

Inhibits DNA methyltransferase. Induces demethylation and reactivation of silenced genes. Increases stem cell reprogramming efficiency. Stimulates osteogenic differentiation of human bone marrow stromal cells. Antitumor agent. Cell permeable.

1. Bender C.M., et al. (1998) Cancer Res. 58: 95.
2. El-Serafi A.T., et al. (2011) Differentiation 81: 35.

PubMed ID: N/A

# Material Safety Data Sheet <br> Decitabine SIH-352-50MG 

This product is for in vitro research use only and is not intended for use in humans or animals
The below information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. StressMarq shall not be held liable for any damage resulting from handling or from contact with the above product. See the Technical Specification, Packing Slip, Invoice, and Product Catalogue for additional terms and conditions of sale.

## Regulatory Information

Classification: Harmful - May be harmful if inhaled, swallowed or absorbed through skin.
Safety Phrases:
S22 - Do not breathe dust
S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection
S24/25-Avoid contact with skin and eyes
Hazard Statements:
H341 - Suspected of causing genetic defects
H360 - May damage fertility or the unborn child
Precautionary Statements:
P280 - Wear protective gloves/protective clothing/ eye protection/ face protection
P308+313 - If exposed or concerned: Get Medical Advise/Attention

## Physical Data

This product consists of powder, shipped at ambient temperatures. The physical properties of this product have not been investigated thoroughly. CAS Number: 2353-33-5

Fire and Explosion Hazard and Reactivity Data
NOT APPLICABLE

## Toxicological Properties

May be harmful by inhalation, ingestion, or skin absorption. The toxicological properties of this product have not been investigated thoroughly. Exercise due caution.

## Preventative Measures

Wear chemical safety goggles and compatible chemical-resistant gloves. Avoid inhalation, contact with eyes, skin or clothing.

## Spill and Leak Procedures

Observe all federal, state and local environmental regulations.

- Wear protective equipment.
- Absorb on sand or vermiculite and place in closed containers for disposal.
- Dispose or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.


## First Aid Measures

- If swallowed, wash out mouth with water, provided person is conscious. Call a physician.
- In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. If a rash or other irritation develops, call a physician.
- If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.
- In case of eye contact, flush with copious amounts of water for at least 15 minutes while separating the eyelids with fingers. Call a physician.

