



<b>Catalog Number:</b>	MC11110	<b>Product Type:</b>	Small Molecule
<b>Bio-Activity:</b>	DNA hypomethylation agent	<b>CAS #:</b>	2353-33-5
<b>Research Categories:</b>	Epigenetics, stem cells, cancer	<b>Chemical Name:</b>	5-Aza-2'-deoxycytidine
<b>Solubility:</b>	Soluble in DMSO (up to 25 mg/ml) or in Water (up to 11 mg/ml).	<b>Molecular Formula:</b>	C <sub>8</sub> H <sub>12</sub> N <sub>4</sub> O <sub>4</sub>
<b>Purity:</b>	> 98%	<b>Molecular Weight:</b>	228.2
<b>Format:</b>	Powder	<b>Ship Temp:</b>	Ambient
<b>Storage:</b>	-20°C		

### Application Notes

#### Description/Data:

Inhibits DNA methyltransferase. Induces demethylation and reactivation of silenced genes suppressing the growth of human tumor cell lines [1]. Increases stem cell reprogramming efficiency. Stimulates osteogenic differentiation of human bone marrow stromal cells [2]. Induces differentiation and growth inhibition in IDH1 mutant glioma cells and decreases tumor growth in vivo [3]. An extremely useful reagent for inhibition of DNA methyltransferases in a variety of experimental systems including zebrafish embryos [4]. Cell permeable. Active in vivo.

#### References:

- 1) CM Bender et al. Cancer Res. 1998 58:95
- 2) AT El-Serafi et al. Differentiation 2011 81:35
- 3) S Turcan et al. Oncotarget 2013 4:1729
- 4) ME Potok et al. Cell 2013 153:759

### FOR RESEARCH USE ONLY

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