

**Catalog # 10-1524**

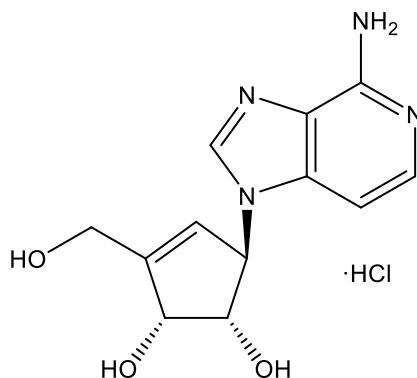
**DZNep HCl**

CAS# 120964-45-6

3-Deazaneplanocin A, HCl; NSC 617989

(1S,2R,5R)-5-(4-Aminoimidazo[4,5-c]pyridine-1-yl)-3-(hydroxymethyl)-cyclopent-3-ene-1,2-diol hydrochloride

Lot # E106456



Potent histone methyltransferase inhibitor which decreases global histone methylation.<sup>1</sup> Inhibits trimethylation of H3K27 and H4K20 *in vitro*.<sup>1</sup> Selectively induces apoptosis in multiple cancer cell lines with no effect on normal cells.<sup>2</sup> May be used in cocktails to chemically induce pluripotent stem cells (CiPSCs) from somatic cells.<sup>3</sup> Enhances angiogenesis in a mouse model of limb ischemia.<sup>4</sup>

- 1) Miranda *et al.* (2009), *DZNep is a global histone methylation inhibitor that reactivates developmental genes not silenced by DNA methylation*; Mol. Cancer Ther., **8** 1579
- 2) Tan *et al.* (2007), *Pharmacologic disruption of Polycomb-repressive complex 2-mediated gene repression selectively induces apoptosis in cancer cells*; Genes Dev., **21** 1050
- 3) Hou *et al.* (2013), *Pluripotent stem cells induced from mouse somatic cells by small-molecule compounds*; Science, **341** 651
- 4) Mitic *et al.* (2015), *EZH2 modulates angiogenesis in vitro and in a mouse model of limb ischemia*; Mol. Ther., **23** 32

**PHYSICAL DATA**

Molecular Weight:	298.73
Molecular Formula:	C <sub>12</sub> H <sub>14</sub> N <sub>4</sub> O <sub>3</sub> · HCl
Purity:	98% by HPLC
	NMR: (Conforms)
Solubility:	Water (up to 40 mg/ml)
Physical Description:	Beige solid
Storage and Stability:	Store as supplied, desiccated at -20°C for up to 1 year from the date of purchase. Solutions in water may be stored at -20°C for up to 1 month.

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