

Catalog # 10-2424 **Echinomycin**

CAS# 512-64-1 Quinomycin A; NSC-13502 Lot # X101828

Echinomycin is a potent and selective hypoxia inducible factor 1α (HIF- 1α) inhibitor. It binds to DNA via bifunctional intercalation, blocking the interaction of HIF-1 α . Protects mice against relapsed acute myeloid leukemia with no effect on hematopoietic stem cells.² Selectively eliminates cancer stem cells in mouse lymphoma and human AML xenogeneic models.3 A very useful tool for probing genes regulated by HIF1a.4

- 1) Kong et al. (2005), Echinomycin, a small-molecule inhibitor of hypoxia-inducible factor-1 DNA-binding activity; Cancer Res., 65 9047
- 2) Wang et al. (2014), Echinomycin protects mice against relapsed acute myeloid leukemia without adverse effect on hematopoietic stem cells; Blood, 124 1127
- 3) Wang et al. (2011), Targeting HIF1α eliminates cancer stem cells in hematological malignancies; Cell Stem Cell., 8 399
- 4) Li et al. (2015), Hypoxia-inducible factor-1α regulates the expression of L-type voltage-dependent Ca(2+) channels in PC12 cells under hypoxia; Cell Stress Chaperones, 20 507

PHYSICAL DATA

1101.26 Molecular Weight:

Solubility:

Molecular Formula: $C_{51}H_{64}N_{12}O_{12}S_2$ Purity: >97% by HPLC NMR: (Conforms)

DMSO (up to 5 mg/ml) Physical Description: White to beige solid

Storage and Stability: Store as supplied, desiccated at -20°C for up to 1 year from the date of purchase. Solutions in

DMSO may be stored at -20°C for up to 3 months.

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