

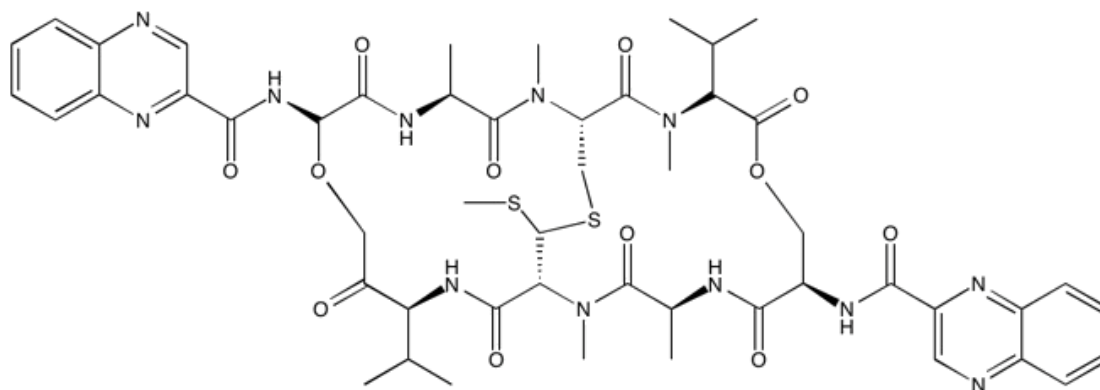
**Catalog # 10-2424**

**Echinomycin**

CAS# 512-64-1

Quinomycin A; NSC-13502

Lot # X101827



Echinomycin is a potent and selective hypoxia inducible factor 1 $\alpha$  (HIF-1 $\alpha$ ) inhibitor. It binds to DNA via bifunctional intercalation, blocking the interaction of HIF-1 $\alpha$ .<sup>1</sup> Protects mice against relapsed acute myeloid leukemia with no effect on hematopoietic stem cells.<sup>2</sup> Selectively eliminates cancer stem cells in mouse lymphoma and human AML xenogeneic models.<sup>3</sup> A very useful tool for probing genes regulated by HIF1 $\alpha$ .<sup>4</sup>

- 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 HIF1 $\alpha$  eliminates cancer stem cells in hematological malignancies*; *Cell Stem Cell.*, **8** 399
- 4) Li *et al.* (2015), *Hypoxia-inducible factor-1 $\alpha$  regulates the expression of L-type voltage-dependent Ca(2+) channels in PC12 cells under hypoxia*; *Cell Stress Chaperones*, **20** 507

**PHYSICAL DATA**

Molecular Weight:	1101.26
Molecular Formula:	C <sub>51</sub> H <sub>64</sub> N <sub>12</sub> O <sub>12</sub> S <sub>2</sub>
Purity:	99% by HPLC
	NMR: (Conforms)
Solubility:	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.

**Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.**