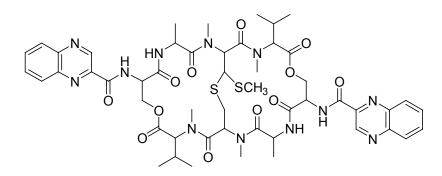


PRODUCT DATA SHEET

Quinomycin A

Code: BIA-Q1102

Pack sizes: 1.0 mg, 5.0 mg



Synonyms : Echinomycin, Actinoleukin, Antibiotic 1491, Antibiotic 59266, Antibiotic X 948, Antibiotic X 53III

Specifications

CAS #	:	512-64-1
Molecular Formula	:	$C_{51}H_{64}N_{12}O_{12}S_2$
Molecular Weight	:	1101.3
Source	:	Streptomyces sp. MST-AS5446
Appearance	:	White solid
Purity	:	> 99% by HPLC
Long Term Storage	:	-20°C
Solubility	:	Soluble in ethanol, methanol, DMF or DMSO.

Application Notes

Quiniomycin A is a cyclic depsipeptide metabolite. It has broad activity against bacteria, fungi and viruses and has found application as an antitumor agent. Quinomycin A acts by bifunctional intercalation of nucleic acids. Recent research has shown quinomycin A to be an extremely potent inhibitor of Hypoxia-inducible factor-1 (HIF-1). This transcription factor plays an essential role in tumor progression and metastasis.

References

- 1. Serendipitous SAD phasing of an echinomycin-(ACGTACGT)2 bisintercalation complex. Cuesta-Seijo J.A. et al. *Acta Crystallogr. D Biol. Crystallogr.* **2006**, 62, 417.
- 2. Echinomycin, a small-molecule inhibitor of hypoxia-inducible factor-1 DNA-binding activity. Kong D. et al. *Cancer Res.* **2005**, 65, 9047.
- 3. Echinomycin and a novel analogue induce apoptosis of HT-29 cells via the activation of MAP kinases pathway. Park J.Y. et al. *Pharmacol. Res.* **2004**, 50, 201.