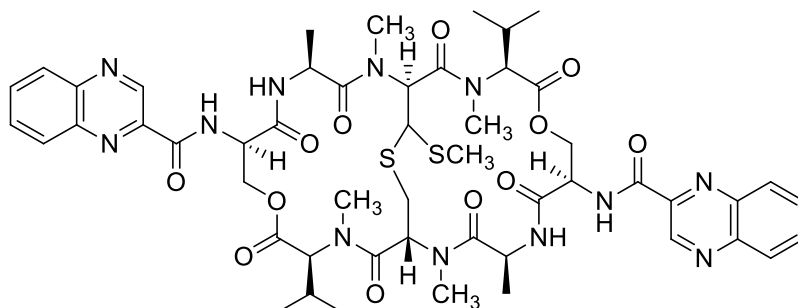


Quinomycin A

Code No.: **BIA-Q1102**

Pack sizes: **1 mg, 5 mg**



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

Specifications

CAS #	: 512-64-1
Molecular Formula	: C₅₁H₆₄N₁₂O₁₂S₂
Molecular Weight	: 1101.3
Source	: <i>Streptomyces</i> sp.
Appearance	: Fawn to off-white solid
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in DMF or DMSO. Limited solubility in ethanol and methanol. Poor water solubility.

Application Notes

Quinomycin A is a cyclic depsipeptide metabolite. Quinomycin A 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.