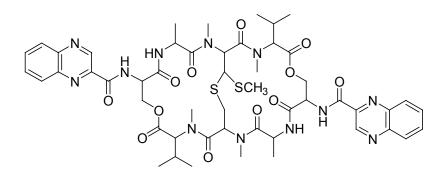


## PRODUCT DATA SHEET

# 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.