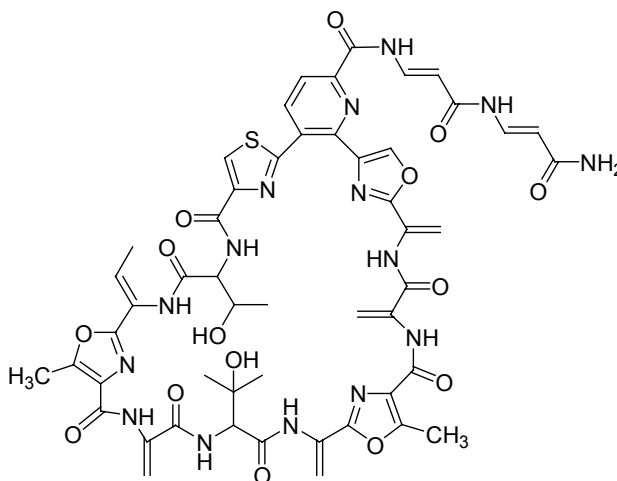


Berninamycin A

Code: **BIA-B1121**

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



Synonyms : **Berninamycin, Antibiotic U27810**

Specifications

CAS # : **58798-97-3**
Molecular Formula : **C₅₁H₅₁N₁₅O₁₅S**
Molecular Weight : **1146.1**
Source : ***Streptomyces* sp. MST-AS5589**
Appearance : **White solid**
Purity : **> 99% by HPLC**
Long Term Storage : **-20°C**
Solubility : **DMSO and DMF, partially soluble in methanol and ethanol, poorly soluble in water**

Application Notes

Berninamycin A is an antibiotic discovered in 1976 was isolated from a strain of *Streptomyces*. Berninamycin A is a macrocyclic "peptide" comprising atypical amino acids linked to thiazole and oxazoles. Chemically very complex, berninamycin A is an inducer of *tipA*, a gene that controls the bacterial transcription regulators, TipAL and TipAS, members of the MerR proteins that are central regulators in multidrug resistance. Closely related to siomycin, a recently discovered inhibitor of oncogenic transcription factor, FoxM1.

References

1. Berninamycin. I. The structure of berninamycinic acid. Liesch, J.M. et al., *J.Am.Chem.Soc.* **1976**, 98, 299.
2. Mode of action of berninamycin. An inhibitor of protein biosynthesis. Reusser F. *Biochem.* **1969**, 8, 3303.
3. Broad spectrum thiopeptide recognition specificity of the *Streptomyces lividans* TipAL protein and its role in regulating gene expression. Chiu M.L. et al. *J. Biol. Chem.* **1999**, 274, 20578.