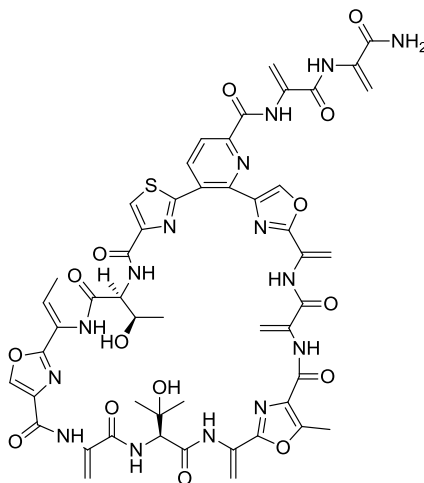


Geninthiocin

Code No.: **BIA-G1033**

Pack sizes: **0.5 mg, 2.5 mg**



Synonyms : 14-Demethylberinamycin

Specifications

CAS #	: 158792-27-9
Molecular Formula	: C ₅₀ H ₄₉ N ₁₅ O ₁₅ S
Molecular Weight	: 1132.1
Source	: Streptomyces sp.
Appearance	: White Amorphous Powder
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in DMF or DMSO. Moderately soluble in methanol or ethanol. Poor water solubility.

Application Notes

Geninthiocin, a thiopeptide antibiotic isolated from a *Streptomyces* sp., is a potent activator of the *tipA* gene, a bacterial transcription regulator involved in multidrug resistance. Geninthiocin displays a 10-fold selectivity for bacteria over mammalian cells lines, whereas the related dedialanyl geninthiocin shows the reverse selectivity. Geninthiocin is closely related to siomycin, a recently discovered inhibitor of oncogenic transcription factor, FoxM1.

References

1. Microbial metabolites with *tipA* promoter inducing activity. II. Geninthiocin, a novel thiopeptide produced by *Streptomyces* sp. DD84. Yun B-S. et al., J. Antibiot. 1994, 47, 969.
2. Structural basis for antibiotic recognition by the TipA class of multidrug-resistance transcriptional regulators. Kahmann J.D. et al., EMBO J. 2003, 22, 1824.