# bioaustralis fine chemicals

### PRODUCT DATA SHEET

Geninthiocin Code: 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. MST-AS5991

Appearance : White Amorphous Powder

Purity : > 95% by HPLC

Long Term Storage : +4°C

Solubility : Soluble in methanol, DMF or DMSO.

## 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. Closely related to siomycin, a recently discovered inhibitor of oncogenic transcription factor, FoxM1.

### References

1. Structural basis for antibiotic recognition by the TipA class of multidrug-resistance transcriptional regulators. Kahmann J.D. et al. *EMBO J.* **2003**, 22, 1824.

2. 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.