

Product Name:	Geninthiocin
Product Number:	G052
CAS Number:	158792-27-9
Molecular Formula:	C ₅₀ H ₄₉ N ₁₅ O ₁₅ S
Molecular Weight:	1132.1
Appearance:	White Amorphous Powder
Storage Conditions:	-20°C
Description:	<p>Geninthiocin is a thiopeptide antibiotic isolated from a <i>Streptomyces</i> sp. 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.</p> <p>Geninthiocin is soluble in DMF or DMSO. Moderately soluble in methanol or ethanol. Poor water solubility.</p>
Mechanism of Action:	Geninthiocin is a potent activator of the tipA gene, a bacterial transcription regulator involved in multidrug resistance.
References:	<p>Microbial metabolites with tipA promoter inducing activity. II. Geninthiocin, a novel thiopeptide produced by <i>Streptomyces</i> sp. DD84. Yun B-S. et al. J. Antibiot. 1994, 47, 969.</p> <p>Structural basis for antibiotic recognition by the TipA class of multidrug-resistance transcriptional regulators. Kahmann J.D. et al. EMBO J. 2003, 22, 1824.</p>