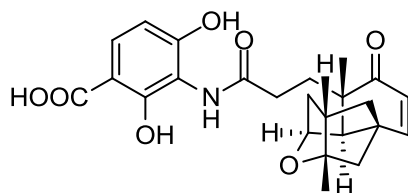


Platensimycin

Code No.: **BIA-P1177**

Pack sizes: **0.25 mg, 1 mg**



Synonyms :

Specifications

CAS #	: 835876-32-9
Molecular Formula	: C ₂₄ H ₂₇ NO ₇
Molecular Weight	: 441.5
Source	: <i>Streptomyces</i> sp.
Appearance	: Light tan solid
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO. Poor water solubility.

Application Notes

Platensimycin is a novel, broad spectrum, Gram-positive antibiotic produced by strains of *Streptomyces platensis*. Its discovery was heralded by high profile publication and commentary in the scientific and lay press. Platensimycin was discovered by a target-based, whole-cell screening strategy using an antisense differential sensitivity assay, based on the inhibition of fatty acid synthesis. Platensimycin inhibits bacterial growth by selectively inhibiting the elongation enzyme, b-ketoacyl acyl carrier protein synthase (FabF) of the fatty acid synthesis pathway.

References

1. Platensimycin is a selective FabF inhibitor with potent antibiotic properties. Wang, J. et al., Nature 2006, 441, 358.
2. Isolation, Structure, and Absolute Stereochemistry of Platensimycin, A Broad Spectrum Antibiotic Discovered Using an Antisense Differential Sensitivity Strategy. Singh S. B. et al., J. Am. Chem. Soc. 2006, 128, 11916.