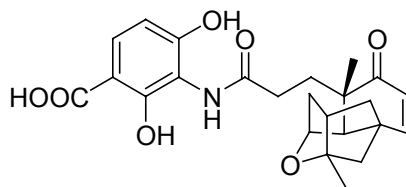


Platensimycin

Code: **BIA-P1177**

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



Synonyms :

Specifications

CAS #	: 835876-32-9
Molecular Formula	: C₂₄H₂₇NO₇
Molecular Weight	: 441.2
Source	: <i>Streptomyces</i> sp. MST-AS5989
Appearance	: White to buff solid
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO.

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 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, β -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.