Product Data Sheet

Platensimycin

Cat. No.: HY-127146

CAS No.: 835876-32-9

Molecular Formula: $C_{24}H_{27}NO_7$ Molecular Weight: 441.47

Target: Antibiotic; Bacterial

Pathway: Anti-infection

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

BIOLOGICAL ACTIVITY

Description

Platensimycin is an antibiotic produced by S. platensis that inhibits gram-positive bacteria by selectively inhibiting cellular lipid biosynthesis (IC_{50} =0.1 μ M). Platensimycin targets the β -ketoacyl-acyl-carrier-protein synthase I/II, FabF/B, an enzyme that participates in the biosynthesis of fatty acids (IC_{50} s=48 nM and 160 nM for S.aureus and E.coli enzymes, respectively). Platensimycin is a promising agent for overcoming antibiotic resistance.

Caution: Product has not been fully validated for medical applications. For research use only.