

Targocil

Chemical Properties

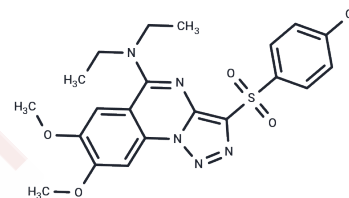
CAS No. : 1200443-21-5

Formula: C₂₁H₂₂ClN₅O₄S

Molecular Weight: 475.95

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



Biological Description

Description	Targocil is used as a bacteriostatic inhibitor of wall teichoic acid (WTA) biosynthesis which can inhibit the growth of methicillin-susceptible <i>S. aureus</i> (MSSA) and methicillin-resistant <i>S. aureus</i> (MRSA) (MIC ₉₀ s: 2 µg/ mL) for both MRSA and MSSA.
Targets(IC ₅₀)	Antibacterial
In vitro	Targocil can inhibit the growth of <i>S. aureus</i> strains Newman, MG2375, MW2, and MG2389 (MICs: 1 µg/mL). Targocil has obviously activity against <i>S. aureus</i> isolates from suspected cases of bacterial keratitis, including both MSSA and MRSA isolates (MICs: 1-2 µg/ mL). Compare to the vehicle alone, Targocil (5 µg/mL) exhibits little toxicity for HCECs, even after 24 h of exposure. However, 40 µg/mL Targocil shows toxicity at all time points tested. In the presence of HCECs, Targocil at levels equal to 10×MIC in vitro readily inhibits the growth of MG2375 and Newman.

Solubility Information

Solubility	DMSO: Slightly soluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1011 mL	10.5053 mL	21.0106 mL
5 mM	0.4202 mL	2.1011 mL	4.2021 mL
10 mM	0.2101 mL	1.0505 mL	2.1011 mL
50 mM	0.042 mL	0.2101 mL	0.4202 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Suzuki T, et al. In vitro antimicrobial activity of wall teichoic acid biosynthesis inhibitors against *Staphylococcus aureus* isolates. *Antimicrob Agents Chemother*. 2011 Feb;55(2):767-74.

Lu Y, Chen F, Zhao Q, et al. Modulation of MRSA virulence gene expression by the wall teichoic acid enzyme TarO. *Nature Communications*. 2023, 14(1): 1594.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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