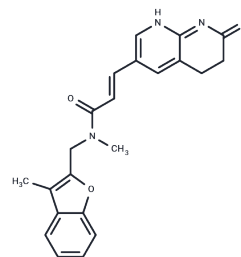


AFN-1252

Chemical Properties

CAS No. : 620175-39-5
 Formula: C₂₂H₂₁N₃O₃
 Molecular Weight: 375.42
 Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
 Actual storage temperature shall be subject to the COA.



Biological Description

Description	AFN-1252 (Debio 1452)(Debio 1452) is an effective inhibitor of enoyl-acyl carrier protein reductase (FabI). It ($\leq 0.12 \mu\text{g/ml}$) inhibits all Clinicalal isolates of Staphylococcus aureus and Staphylococcus epidermidis.
Targets(IC50)	Antibacterial,Antibiotic

Solubility Information

Solubility	DMSO: 5.8 mg/mL (15.45 mM),Sonication is recommended. ($< 1 \text{ mg/ml}$ refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6637 mL	13.3184 mL	26.6368 mL
5 mM	0.5327 mL	2.6637 mL	5.3274 mL
10 mM	0.2664 mL	1.3318 mL	2.6637 mL
50 mM	0.0533 mL	0.2664 mL	0.5327 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

- Karlowsky JA, et al. AFN-1252, a FabI inhibitor, demonstrates a Staphylococcus-specific spectrum of activity. *Antimicrob Agents Chemother.* 2009 Aug;53(8):3544-8.
- Narasimha Rao K, et al. AFN-1252 is a potent inhibitor of enoyl-ACP reductase from Burkholderia pseudomallei- Crystal structure, mode of action, and biological activity. *Protein Sci.* 2015 May;24(5):832-40.
- Yao J, et al. Resistance to AFN-1252 arises from missense mutations in Staphylococcus aureus enoyl-acyl carrier protein reductase (FabI). *J Biol Chem.* 2013 Dec 20;288(51):36261-71.
- Parsons JB, et al. Perturbation of Staphylococcus aureus gene expression by the enoyl-acyl carrier protein reductase inhibitor AFN-1252. *Antimicrob Agents Chemother.* 2013 May;57(5):2182-90.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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