

## Gepotidacin mesylate dihydrate

### Chemical Properties

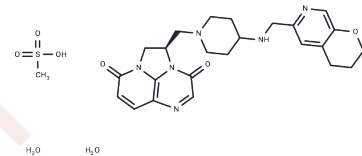
CAS No. : 1624306-20-2

Formula: C<sub>25</sub>H<sub>36</sub>N<sub>6</sub>O<sub>8</sub>S

Molecular Weight: 580.65

Storage: Store at low temperature, Keep away from moisture  
 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	Gepotidacin mesylate dihydrate (GSK2140944 mesylate dihydrate) is an orally available triazaacenaphthylene antibiotic with antibacterial activity. Gepotidacin mesylate dihydrate is an inhibitor of bacterial type II topoisomerase. Gepotidacin mesylate dihydrate inhibits bacterial DNA replication by blocking topoisomerase and can be used to study bacterial infection.
Targets(IC50)	Antibacterial, Antibiotic, Autophagy, Topoisomerase
In vitro	Gepotidacin mesylate dihydrate is a potent inhibitor for catalase-catalyzed DNA superhelix (IC <sub>50</sub> ≈ 0.047 μM) and inhibit positive superhelix substrate relaxation (IC <sub>50</sub> ≈ 0.6 μM). [1] Gepotidacin mesylate dihydrate against E. coli isolates from Mueller-Hinton. The MIC ranged from 1 to 4 mg/L. [2]

### Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.7222 mL	8.611 mL	17.2221 mL
5 mM	0.3444 mL	1.7222 mL	3.4444 mL
10 mM	0.1722 mL	0.8611 mL	1.7222 mL
50 mM	0.0344 mL	0.1722 mL	0.3444 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

Gibson EG, et al. Mechanistic and Structural Basis for the Actions of the Antibacterial Gepotidacin against Staphylococcus aureus Gyrase. ACS Infect Dis. 2019 Apr 12;5(4):570-581.

Watkins RR, et al. Gepotidacin: a novel, oral, 'first-in-class' triazaacenaphthylene antibiotic for the treatment of uncomplicated urinary tract infections and urogenital gonorrhoea. J Antimicrob Chemother. 2023 May 3;78(5): 1137-1142.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481