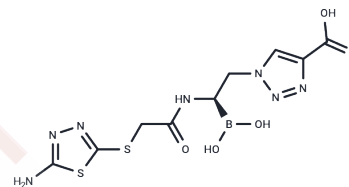


MB076

## Chemical Properties

CAS No. : 2832966-95-5  
 Formula: C<sub>9</sub>H<sub>12</sub>N<sub>7</sub>O<sub>5</sub>S<sub>2</sub>  
 Molecular Weight: 373.18  
 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	MB076 is an innovative heterocyclic triazole designed with enhanced plasma stability. It effectively inhibits seven distinct Class C Acinetobacter-derived cephalosporinases (ADCs) $\beta$ -lactamase variants with $K_i$ values less than 1 $\mu$ M. Additionally, MB076 demonstrates a synergistic effect when combined with various cephalosporins to restore pBCSK(-) susceptibility [1].
Targets(IC50)	Others,Antibacterial,Antibiotic
In vitro	MB076 (compound B) demonstrates exceptional stability in human plasma at concentrations ranging from 0.5 to 5 $\mu$ M over 48 hours, with a half-life ( $t_{1/2}$ ) of 29 hours, significantly exceeding the 9 hours observed for ADC-7/S02030 (PDB4U0X) [1]. Additionally, when combined at a concentration of 10 $\mu$ g/mL with Cefotaxime (CTX) for 48 hours, MB076 synergistically restores drug sensitivity in pBCSK(-) [1]. Cell viability assays [1] conducted in human plasma with concentrations from 0.5 $\mu$ M to 5 $\mu$ M and an incubation period of 48 hours further confirm the compound's outstanding stability.

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6797 mL	13.3984 mL	26.7967 mL
5 mM	0.5359 mL	2.6797 mL	5.3593 mL
10 mM	0.268 mL	1.3398 mL	2.6797 mL
50 mM	0.0536 mL	0.268 mL	0.5359 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.

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

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