

MG-T-19

## Chemical Properties

CAS No. : 328540-44-9

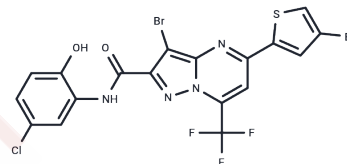
Formula: C<sub>18</sub>H<sub>8</sub>Br<sub>2</sub>ClF<sub>3</sub>N<sub>4</sub>O<sub>2</sub>S

Molecular Weight: 596.6

Store at low temperature

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	MG-T-19, a TIM-3 inhibitor (KD=0.26 μM), significantly inhibited the interaction of TIM-3 with PtdSer, CEACAM1, and Gal-9, and increased the production of TNF-α and IFN-γ in PBMCs, which reactivated the tumor-attacking ability of T cells.
Targets(IC50)	Immunology/Inflammation related
In vitro	MG-T-19 is a mannose-derived compound with antimicrobial activity. In vitro, MG-T-19 (2-16 μg/mL) effectively inhibits the growth of various Pseudomonas aeruginosa strains, including drug-resistant clinical isolates. MG-T-19 blocks bacterial adhesion to host cells and prevents biofilm formation across different human cell models[1].
In vivo	In a murine lung infection model, MG-T-19 (10 mg/kg, intranasal administration) significantly reduces bacterial burden in lung tissue, alleviates histopathological damage, and improves survival. MG-T-19 also enhances the efficacy of antibiotics like ceftazidime, showing synergistic antimicrobial effects[1].

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.6762 mL	8.3808 mL	16.7616 mL
5 mM	0.3352 mL	1.6762 mL	3.3523 mL
10 mM	0.1676 mL	0.8381 mL	1.6762 mL
50 mM	0.0335 mL	0.1676 mL	0.3352 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

Abdel-Rahman SA, Gabr MT. Small molecules from antibody pharmacophores (SMAbPs) as a hit identification workflow for immune checkpoints. Sci Adv. 2024 Oct 18;10(42):eadq5540.

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