

MM 419447

Chemical Properties

CAS No. : 1092457-78-7

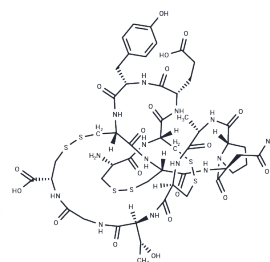
Formula: C50H70N14O19S6

Molecular Weight: 1363.55

Keep away from moisture

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	MM 419447 is a guanylate cyclase-C agonist, and it is a metabolite of linaclotide. This compound, MM 419447, shows promise in the field of irritable bowel syndrome with constipation (IBS-C) research.
Targets(IC50)	Guanylate cyclase
In vitro	MM 419447 demonstrates strong binding affinity for T84 cells, leading to a notable, concentration-dependent increase in intracellular cyclic guanosine-3',5'-monophosphate (cGMP)[1].
In vivo	Administration of MM 419447 at a dosage of 10 mg/kg orally to female Sprague-Dawley rats resulted in peak plasma concentration (Cmax) of 27 ng/mL, an area under the curve (AUC0-6) of up to 29.7 ng·h/mL, and a half-life (t1/2) of 0.33 hours, according to pharmacokinetic analysis[1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.7334 mL	3.6669 mL	7.3338 mL
5 mM	0.1467 mL	0.7334 mL	1.4668 mL
10 mM	0.0733 mL	0.3667 mL	0.7334 mL
50 mM	0.0147 mL	0.0733 mL	0.1467 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

Busby RW, et al. Pharmacologic properties, metabolism, and disposition of linaclotide, a novel therapeutic peptide approved for the treatment of irritable bowel syndrome with constipation and chronic idiopathic constipation. J Pharmacol Exp Ther. 2013;344(1):196-206.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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