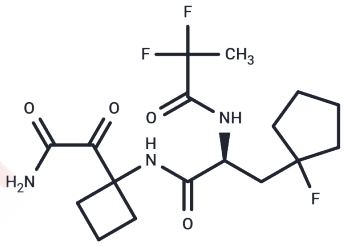
Data Sheet (Cat.No.T12051)

TargetMol

MIV-247

Chemical Properties



CAS No. : 1352817-76-5

Formula: C17H24F3N3O4

Molecular Weight: 391.39

Storage: Store at low temperature
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	MIV-247 is a selective and potent inhibitor of cathepsin S (Kis 2.1, 4.2, and 7.5 nM for human, mouse, and wild monkey cathepsin S, respectively), which attenuates mechanical anomalies in preclinical models of neuropathic pain, and can be used to study cardiac muscle injury.
Targets(IC50)	Cysteine Protease
In vivo	To assess the potential neurobehavioral side effects of MIV-247, oral administration of MIV-247 (100-200 μmol/kg) resulted in a dose-dependent reduction of mechanical allodynia, with up to approximately 50% reversal observed after single or twice-daily dosing for 5 days. No behavioral deficits were observed with any dose of MIV-247 tested [1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.555 mL	12.775 mL	25.550 mL
5 mM	0.511 mL	2.555 mL	5.110 mL
10 mM	0.2555 mL	1.2775 mL	2.555 mL
50 mM	0.0511 mL	0.2555 mL	0.511 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

Hewitt E. et al. Selective Cathepsin S Inhibition with MIV-247 Attenuates Mechanical Allodynia and Enhances the Antiallodynic Effects of Gabapentin and Pregabalin in a Mouse Model of Neuropathic Pain. J Pharmacol Exp Ther. 2016 Sep;358(3):387-96.

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