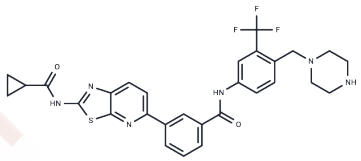
Data Sheet (Cat.No.T11559)

TargetMol

HG-12-6

Chemical Properties



CAS No. : 2222354-57-4

Formula: C29H27F3N6O2S

Molecular Weight: 580.62

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	HG-12-6 is a type II inhibitor of IRAK4, demonstrating preferential binding to unphosphorylated inactive IRAK4 (IC50: 165 nM) and modulating IRAK4 activity in autoimmunity and inflammation.
Targets(IC50)	Others,IRAK
In vitro	HG-12-6 has a better binding affinity for the unphosphorylated inactive IRAK4 kinase domain (IC50 of 165 nM) than the phosphorylated active IRAK4 kinase domain (IC50 of 2876 nM).The in-house compound HG-12-6 has a similar chemical scaffold as Ponatinib.?The most differentiating components are the head of the inhibitor and the lack of a methyl substituent on ring A. Without the methyl substituent on ring A, the entire HG-12-6 molecule shifts inward to the ATP pocket in comparison with the binding mode of Ponatinib.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.7223 mL	8.6115 mL	17.223 mL
5 mM	0.3445 mL	1.7223 mL	3.4446 mL
10 mM	0.1722 mL	0.8611 mL	1.7223 mL
50 mM	0.0344 mL	0.1722 mL	0.3445 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

Wang L, et al. Conformational flexibility and inhibitor binding to unphosphorylated interleukin-1 receptor-associated kinase 4 (IRAK4). J Biol Chem. 2019 Mar 22;294(12):4511-4519.

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