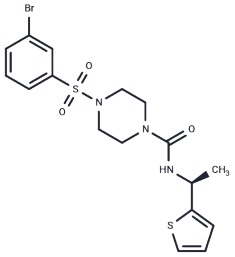
Data Sheet (Cat.No.T13063)

T6167923

Chemical Properties



CAS No. : 2437475-16-4

Formula: C17H20BrN3O3S2

Molecular Weight: 458.39

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	T6167923 is a potent, selective inhibitor of MyD88-dependent signaling pathways. It achieves this by directly binding to the Toll/IL1 receptor (TIR) domain of MyD88, preventing MyD88 homodimer formation. Subsequently, T6167923 impedes NF-κB driven Staphylococcus enterotoxin AP (SEAP) activity and boasts improved anti-inflammatory effects, with IC50s values of 2.7 μM for IFN-γ, 2.9 μM for IL-1β, and 2.66 μM each for IL-6 and TNF-α, demonstrating its efficacy across multiple inflammatory mediators [1].
Targets(IC50)	MyD88

Solubility Information

Solubility	DMSO: 250 mg/mL (545.39 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 5 mg/mL (10.91 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1815 mL	10.9077 mL	21.8155 mL
5 mM	0.4363 mL	2.1815 mL	4.3631 mL
10 mM	0.2182 mL	1.0908 mL	2.1815 mL
50 mM	0.0436 mL	0.2182 mL	0.4363 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

Saqib U, et al. Identifying the inhibition of TIR proteins involved in TLR signalling as an anti-inflammatory strategy. SAR QSAR Environ Res. 2018 Apr;29(4):295-318.

Olson MA, et al. Discovery of small molecule inhibitors of MyD88-dependent signaling pathways using a computational screen. Sci Rep. 2015 Sep 18;5:14246.