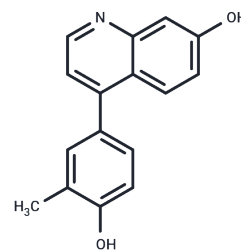


CU-CPT9b

Chemical Properties

CAS No. :	2162962-69-6
Formula:	C ₁₆ H ₁₃ N ₂ O ₂
Molecular Weight:	251.28
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	CU-CPT9b (TLR8-specific antagonist 1) is an antagonist of toll-like receptor 8 (TLR8; K _d = 21 nM). It inhibits activation of NF- κ B induced by the TLR8 agonist R-848 in TLR8-overexpressing HEK-Blue cells with an IC ₅₀ value of 0.7 nM.
Targets(IC ₅₀)	TLR

Solubility Information

Solubility	DMSO: 100 mg/mL (397.96 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: 4 mg/mL (15.92 mM), Sonication is recommended. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.9796 mL	19.8981 mL	39.7962 mL
5 mM	0.7959 mL	3.9796 mL	7.9592 mL
10 mM	0.398 mL	1.9898 mL	3.9796 mL
50 mM	0.0796 mL	0.398 mL	0.7959 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

Zhang S , Hu Z , Tanji H , et al. Small-molecule inhibition of TLR8 through stabilization of its resting state[J]. Nature Chemical Biology, 2017, 14(1):58-64.

Yang W , Sun X , Liu S , et al. TLR8 agonist Motolimod-induced inflammatory death for treatment of acute myeloid leukemia. Biomedicine & Pharmacotherapy. 2023, 163: 114759.

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