

CU-CPD107

Chemical Properties

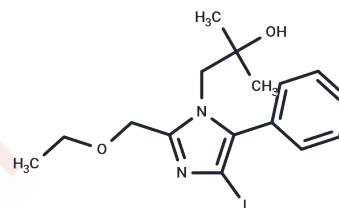
CAS No. : 2573912-32-8

Formula: C₁₆H₂₁N₂O₂

Molecular Weight: 400.25

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-CPD107 is a selective agonist of toll-like receptor 8 (TLR8) and also shows activation activity against ssRNA ligands. CU-CPD107 acts as an inhibitor of TLR8 signaling in the presence of R848 (IC ₅₀ =13.7 μM). CU-CPD107 exhibited coagonist activity in the presence of ssRNA, while CU-CPD107 alone could not affect TLR8 signal transduction.
Targets(IC ₅₀)	TLR
In vitro	CU-CPD107 behaved an agonist in the presence of ssRNA in HEK-Blue hTLR8 cells, resulting in a fivefold activation at 100μM by SEAP assay relative to the control. Crucially, CU-CPD107 displayed no agonistic potential in the absence of ssRNA[1].

Solubility Information

Solubility	DMSO: 1.8 mg/mL (4.5 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4984 mL	12.4922 mL	24.9844 mL
5 mM	0.4997 mL	2.4984 mL	4.9969 mL
10 mM	0.2498 mL	1.2492 mL	2.4984 mL
50 mM	0.050 mL	0.2498 mL	0.4997 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

Yang Y, et al. Tetrasubstituted imidazoles as incognito Toll-like receptor 8a(ntl)agonists. Nat Commun. 2021 Jul 16;12(1):4351.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481