

Cot inhibitor-2

Chemical Properties

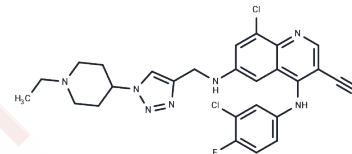
CAS No. : 915363-56-3

Formula: C₂₆H₂₅Cl₂FN₈

Molecular Weight: 539.43

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	Cot inhibitor-2 is a cot (Tpl2/MAP3K8) inhibitor (IC ₅₀ : 1.6 nM) with potency, selectivity and oral activity. cot inhibitor-2 inhibits LPS-stimulated TNF- α production in human whole blood with an IC ₅₀ of 0.3 μ M.
Targets(IC ₅₀)	MAPK, TNF
In vivo	Cot inhibitor-2 (100 mg/kg ; orally ; rats) showed a C _{max} of 517 ng/mL (0.89 μ M) and AUC of 4841 ng·h/mL.[1] Cot inhibitor-2 (25 mg/kg ; p.o. ; rats) is tested in the LPS-induced TNF- α production model in female Sprague-Dawley rats that Cot inhibitor-2 inhibits LPS-induced TNF- α production by 83%. [1]

Solubility Information

Solubility	DMSO: 40 mg/mL (74.15 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: 2.5 mg/mL (4.63 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	1.8538 mL	9.269 mL	18.5381 mL
5 mM	0.3708 mL	1.8538 mL	3.7076 mL
10 mM	0.1854 mL	0.9269 mL	1.8538 mL
50 mM	0.0371 mL	0.1854 mL	0.3708 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

Wu J, et al. Selective inhibitors of tumor progression loci-2 (Tpl2) kinase with potent inhibition of TNF-alpha production in human whole blood. *Bioorg Med Chem Lett.* 2009 ; 19(13):3485-3488.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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