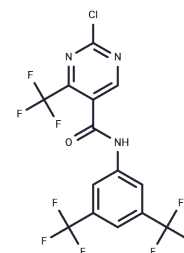


SP-100030

Chemical Properties

CAS No. : 154563-54-9
Formula: C₁₄H₅ClF₉N₃O
Molecular Weight: 437.65
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	SP-100030 is a dual inhibitor of NF-κB and activator protein-1 (AP-1), demonstrating potent inhibition with IC ₅₀ values of 50 nM for both. It effectively reduces the production of IL-2, IL-8, and TNF-alpha in Jurkat and other T cell lines. Additionally, SP-100030 has been shown to decrease the severity of murine collagen-induced arthritis (CIA).
Targets(IC ₅₀)	NF-κB
In vitro	SP-100030 blocks the production of IL-2 and IL-8 in Jurkat T-cells at the same concentrations as seen in the luciferase assay (IC ₅₀ ≈30 nM)[1]. ELISA and RT-PCR confirmed that IL-2, IL-8, and TNF-alpha production by activated Jurkat and other T cell lines were inhibited by SP100030[2].
In vivo	SP100030 (10 mg/kg/day; i.p.; day 21 to day 34) significantly decreased arthritis severity[2].

Solubility Information

Solubility	DMSO: 50 mg/mL (114.25 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	2.2849 mL	11.4247 mL	22.8493 mL
5 mM	0.457 mL	2.2849 mL	4.5699 mL
10 mM	0.2285 mL	1.1425 mL	2.2849 mL
50 mM	0.0457 mL	0.2285 mL	0.457 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

Sullivan RW, et al. 2-Chloro-4-(trifluoromethyl)pyrimidine-5-N-(3',5'- bis(trifluoromethyl)phenyl)-carboxamide: a potent inhibitor of NF-kappa B- and AP-1-mediated gene expression identified using solution-phase combinatorial chemistry. *J Med Chem.* 1998;4

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Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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