

S63845

Chemical Properties

CAS No. : 1799633-27-4

Formula: C₃₉H₃₇ClF₄N₆O₆S

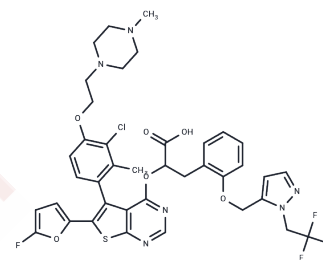
Molecular Weight: 829.26

Storage:

Store at low temperature, Keep away from direct sunlight

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	S63845 is a selective myeloid leukemia 1 (MCL1) inhibitor that binds to human MCL1 with a K _d of 0.19 nM.
Targets (IC ₅₀)	Bcl-2 Family
In vitro	METHODS: HCT-116 cells were treated with S63845 (0.001-10 μM), and the levels of MCL1 and BCL-XL proteins in the cells were analyzed by Western blot. RESULTS S63845 effectively increased the level of MCL1 protein in the HCT-116 colon cancer cell line, but had no effect on the level of BCL-XL protein. The increase in MCL1 protein level was not accompanied by an increase in MCL1 mRNA level, but was associated with a prolonged protein half-life. [1]
In vivo	METHODS: S63845 (6.25, 12.5, 25 mg/kg, intravenous injection) was used to treat immunocompromised mice bearing human multiple myeloma (H929 and AMO1) xenografts, and its antitumor activity was observed. RESULTS S63845 showed dose-dependent antitumor activity; the maximum tumor growth inhibition (TGImax) was 114% in the AMO1 model and 103% in the H929 model. [1]

Solubility Information

Solubility	DMSO: 33.33 mg/mL (40.19 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 mg/mL (2.41 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	1.2059 mL	6.0295 mL	12.0589 mL
5 mM	0.2412 mL	1.2059 mL	2.4118 mL
10 mM	0.1206 mL	0.6029 mL	1.2059 mL
50 mM	0.0241 mL	0.1206 mL	0.2412 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

Kotschy A, et al. The MCL1 inhibitor S63845 is tolerable and effective in diverse cancer models. *Nature*. 2016 Oct 27;538(7626):477-482.

Li Y, Lee H H, Jiang V C, et al. Potentiation of apoptosis in drug-resistant mantle cell lymphoma cells by MCL-1 inhibitor involves downregulation of inhibitor of apoptosis proteins. *Cell Death & Disease*. 2023, 14(11): 714.

Merino D, et al. Synergistic action of the MCL-1 inhibitor S63845 with current therapies in preclinical models of triple-negative and HER2-amplified breast cancer. *Sci Transl Med*. 2017 Aug 2;9(401):eaam7049.

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