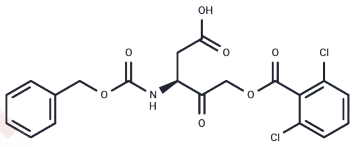
Data Sheet (Cat.No.T13378)

TargetMol

Z-Asp-CH2-DCB

Chemical Properties



CAS No. : 153088-73-4

Formula: C20H17Cl2NO7

Molecular Weight: 454.26

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	Z-Asp-CH2-DCB is an irreversible inhibitor of broad-spectrum caspases.
Targets(IC50)	Apoptosis,Others,Caspase
In vitro	Z-Asp-CH2-DCB (10-100 μM) dose-dependently inhibits the production of IL-1β, TNF-α, IL-6, and IFN-γ in SEB-stimulated (200 ng) PBMC, and suppresses the chemokines MCP-1, MIP-1α, and MIP-1β[1]. Additionally, Z-Asp-CH2-DCB reduces IL-1β, IL-6, TNF-α, IFN-γ, MCP-1, MIP-1α, and MIP-1β production in TSST-1-activated PBMC to 10%, 36%, 25%, 10%, 11%, 25%, and 30%, respectively[1].
In vivo	SU5416-induced septal cell apoptosis prevented byZ-Asp-CH2-DCB (1 mg; i.p.; every day for 3 weeks)[1].

Solubility Information

Solubility	DMSO: 95.4 mg/mL (210.01 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: 3.3 mg/mL (7.26 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2014 mL	11.0069 mL	22.0138 mL
5 mM	0.4403 mL	2.2014 mL	4.4028 mL
10 mM	0.2201 mL	1.1007 mL	2.2014 mL
50 mM	0.044 mL	0.2201 mL	0.4403 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

Krakauer T, et al. Caspase inhibitors attenuate superantigen-induced inflammatory cytokines, chemokines, and T-cell proliferation. Clin Diagn Lab Immunol. 2004 May;11(3):621-4.
Kasahara Y, et al. Inhibition of VEGF receptors causes lung cell apoptosis and emphysema. J Clin Invest. 2000 Dec;106(11):1311-9.
Twumasi P, et al. Caspase inhibitors affect the kinetics and dimensions of tracheary elements in xylogenic Zinnia (Zinnia elegans) cell cultures. BMC Plant Biol. 2010 Aug 6;10:162.