

dBET1

Chemical Properties

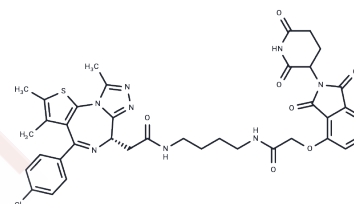
CAS No. : 1799711-21-9

Formula: C₃₈H₃₇ClN₈O₇S

Molecular Weight: 785.27

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	dBET1 is a hybrid molecule that combines (+)-JQ1 and thalidomide. It induces cereblon-dependent BET protein degradation in vitro (EC ₅₀ : 430 nM) and induces apoptosis.
Targets(IC ₅₀)	Epigenetic Reader Domain, PROTACs
In vitro	dBET1 induced a potent and superior inhibitory effect on MV4;11 cell proliferation at 24 hours (measured by ATP content, IC ₅₀ = 0.14 μM, compared to IC ₅₀ = 1.1 μM with JQ1) consistent with the reported, pronounced inhibitory effect of RNA silencing of BRD4 in this and other models of MLL-rearranged leukemia.

Solubility Information

Solubility	DMSO: 250 mg/mL (318.36 mM), Sonication is recommended. H ₂ O: Insoluble, Ethanol: 5 mg/mL (6.37 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 3.3 mg/mL (4.2 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	1.2734 mL	6.3672 mL	12.7345 mL
5 mM	0.2547 mL	1.2734 mL	2.5469 mL
10 mM	0.1273 mL	0.6367 mL	1.2734 mL
50 mM	0.0255 mL	0.1273 mL	0.2547 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

Winter GE, et al. DRUG DEVELOPMENT. Phthalimide conjugation as a strategy for in vivo target protein degradation. Science. 2015 Jun 19;348(6241):1376-81.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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