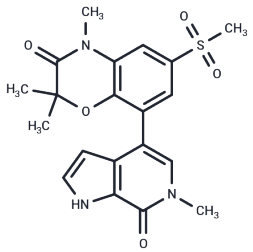
Data Sheet (Cat.No.T5417)

TargetMol

INCB-057643

Chemical Properties



CAS No. : 1820889-23-3

Formula: C20H21N3O5S

Molecular Weight: 415.46

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	INCB057643 is a potent, selective and orally bioavailable BET inhibitor.
Targets(IC50)	Apoptosis,Epigenetic Reader Domain
In vitro	INCB057643 inhibited binding of BRD2/BRD3/BRD4 to an acetylated histone H4 peptide in the low nM range and was selective against other bromodomain-containing proteins. INCB057643 inhibited proliferation of human AML, DLBCL, and multiple myeloma cell lines, with a corresponding decrease in MYC protein levels. Cell cycle analyses indicated that G1 arrest and a concentration-dependent increase in apoptosis were seen within 48 hours of treatment with INCB057643. BRD proteins also regulate the expression of many pro-inflammatory genes. Production of several cytokines, including IL-6, IL-10 and MIP-1α, was repressed by INCB057643 in human and mouse whole blood stimulated ex vivo with LPS [1].
In vivo	Oral administration of INCB057643 resulted in significant anti-tumor efficacy in xenograft models of AML, myeloma, and DLBCL. Additionally, combining INCB057643 with the standard of care agents used for the treatment of DLBCL including rituximab and bendamustine resulted in enhanced anti-tumor efficacy relative to that achieved with single-agent therapies at doses that were well tolerated [1].

Solubility Information

Solubility	DMSO: 65 mg/mL (156.45 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 (4.81 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	2.407 mL	12.0349 mL	24.0697 mL
5 mM	0.4814 mL	2.407 mL	4.8139 mL
10 mM	0.2407 mL	1.2035 mL	2.407 mL
50 mM	0.0481 mL	0.2407 mL	0.4814 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

Matthew C. Stubbs, et al. Abstract 5071: Preclinical characterization of the potent and selective BET inhibitor INCB057643 in models of hematologic malignancies. AACR; Cancer Res 2017;77(13 Suppl):Abstract nr 5071.
Wilson AJ, et al. The BET inhibitor INCB054329 reduces homologous recombination efficiency and augments PARP inhibitor activity in ovarian cancer. Gynecol Oncol. 2018 Jun;149(3):575-584.