# **Product** Data Sheet

## INCB-057643

Cat. No.: HY-111485 CAS No.: 1820889-23-3 Molecular Formula:  $C_{20}H_{21}N_3O_5S$ Molecular Weight: 415.46

Target: Epigenetic Reader Domain; Apoptosis

Pathway: Epigenetics; Apoptosis

Powder -20°C Storage: 3 years

In solvent

2 years -80°C 2 years

-20°C 1 year

#### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 62.5 mg/mL (150.44 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.4070 mL	12.0349 mL	24.0697 mL
	5 mM	0.4814 mL	2.4070 mL	4.8139 mL
	10 mM	0.2407 mL	1.2035 mL	2.4070 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (5.01 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (5.01 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (5.01 mM); Clear solution

### **BIOLOGICAL ACTIVITY**

Description

INCB-057643 is a novel, orally bioavailable BET inhibitor.

IC<sub>50</sub> & Target

BET<sup>[1]</sup>

In Vitro

INCB-057643 is a novel, orally bioavailable BET inhibitor. INCB-057643 inhibits binding of BRD2/BRD3/BRD4 to an acetylated histone H4 peptide in the low nM range, and is selective against other bromodomain containing proteins. In vitro analyses show that INCB-057643 inhibits proliferation of human AML, DLBCL, and multiple myeloma cell lines, with a corresponding

	decrease in MYC protein levels. Cell cycle analyses indicate that $G_1$ arrest and a concentration-dependent increase in apoptosis are seen within 48 hours of treatment with INCB-057643 <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Production of several cytokines, including IL-6, IL-10 and MIP-1 $\alpha$ , is repressed by INCB-057643 in human and mouse whole blood stimulated ex vivo with LPS. Oral administration of INCB-057643 results in significant anti-tumor efficacy in xenograft models of AML, myeloma, and DLBCL. Additionally, combining INCB-057643 with standard of care agents used for the treatment of DLBCL including rituximab and bendamustine results in enhanced anti-tumor efficacy relative to that achieved with single agent therapies at doses that are well tolerated <sup>[1]</sup> .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.

#### **REFERENCES**

[1]. 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.

Caution: Product has not been fully validated for medical applications. For research use only.

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