# **Product** Data Sheet

## **MAK683**

Cat. No.: HY-103663 CAS No.: 1951408-58-4 Molecular Formula: C<sub>20</sub>H<sub>17</sub>FN<sub>6</sub>O Molecular Weight: 376.39

Target: Histone Methyltransferase

Pathway: **Epigenetics** 

Storage: Powder -20°C 3 years

 $4^{\circ}C$ 2 years

In solvent -80°C 2 years

> -20°C 1 year

#### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 40 mg/mL (106.27 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.6568 mL	13.2841 mL	26.5682 mL
	5 mM	0.5314 mL	2.6568 mL	5.3136 mL
	10 mM	0.2657 mL	1.3284 mL	2.6568 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: 2.17 mg/mL (5.77 mM); Suspended solution; Need ultrasonic
- 2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.17 mg/mL (5.77 mM); Clear solution

### **BIOLOGICAL ACTIVITY**

Description	MAK683 is an embryonic ectoderm development (EED) inhibitor extracted from patent US20160176882 A1, compound example 2. MAK683 exhibits $IC_{50}$ s of 59, 89, 26 nM in EED Alphascreen binding, LC-MS and ELISA assay <sup>[1][2]</sup> .	
IC <sub>50</sub> & Target	IC50: 59 nM (EED Alphascreen), 89 nM (LC-MS), 26 nM (ELISA) <sup>[1]</sup>	
In Vitro	MAK683 has antiproliferative activities in B cell lymphoma cell KARPAS422 after 14 days of treatment with an IC $_{50}$ of 30 nM $^{[1]}$ .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.	

## **CUSTOMER VALIDATION**

• Cell Death Dis. 2022 Feb 15;13(2):155.

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#### **REFERENCES**

[1]. Chan, Ho Man, et al. TRIAZOLOPYRIMIDINE COMPOUNDS AND USES THEREOF. US20160176882 A1.

[2]. Huang D, et al. Binding Modes of Small-Molecule Inhibitors to the EED Pocket of PRC2. Chemphyschem. 2020 Feb 4;21(3):263-271.

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

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