

# **Product** Data Sheet

### JBI-589

Cat. No.: HY-153450 CAS No.: 2308504-22-3 Molecular Formula:  $C_{29}H_{28}FN_5O$ Molecular Weight: 481.56

Target: Protein Arginine Deiminase

Pathway: Epigenetics

Storage: Powder -20°C 3 years

4°C 2 years

In solvent -80°C 6 months

-20°C 1 month

#### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 125 mg/mL (259.57 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.0766 mL	10.3829 mL	20.7658 mL
	5 mM	0.4153 mL	2.0766 mL	4.1532 mL
	10 mM	0.2077 mL	1.0383 mL	2.0766 mL

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

## **BIOLOGICAL ACTIVITY**

Description

JBI-589 is a non-covalent PAD4 isoform-selective inhibitor. JBI-589 reduces CXCR2 expression and blocks neutrophil chemotaxis. JBI-589 reduces primary tumor and metastases, and enhances the anti-tumor effect of checkpoint inhibitors  $^{[1]}$ .

#### **REFERENCES**

[1]. Deng H, et al. A Novel Selective Inhibitor JBI-589 Targets PAD4-Mediated Neutrophil Migration to Suppress Tumor Progression. Cancer Res. 2022 Oct 4;82(19):3561-3572.

[2]. Gajendran C, et al. Alleviation of arthritis through prevention of neutrophil extracellular traps by an orally available inhibitor of protein arginine deiminase 4. Sci Rep. 2023 Feb 23;13(1):3189.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

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