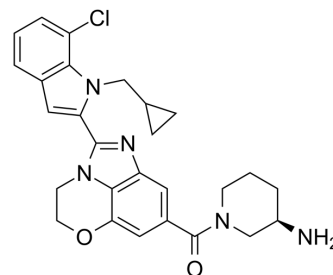


## PAD-IN-2

<b>Cat. No.:</b>	HY-135304		
<b>CAS No.:</b>	2304852-21-7		
<b>Molecular Formula:</b>	C <sub>27</sub> H <sub>28</sub> ClN <sub>5</sub> O <sub>2</sub>		
<b>Molecular Weight:</b>	490		
<b>Target:</b>	Protein Arginine Deiminase		
<b>Pathway:</b>	Epigenetics		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



## SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 70 mg/mL (142.86 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	<b>Preparing Stock Solutions</b>	1 mM	2.0408 mL	10.2041 mL	20.4082 mL
		5 mM	0.4082 mL	2.0408 mL	4.0816 mL
10 mM		0.2041 mL	1.0204 mL	2.0408 mL	
Please refer to the solubility information to select the appropriate solvent.					
<b>In Vivo</b>	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 5.25 mg/mL (10.71 mM); Clear solution  2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 5.25 mg/mL (10.71 mM); Clear solution				

## BIOLOGICAL ACTIVITY

<b>Description</b>	PAD-IN-2 is a potent pad4 inhibitor (IC <sub>50</sub> : <1 μM). PAD-IN-2 can be used in the research of auto-immune diseases and cancers, such as rheumatoid arthritis, vasculitis, systemic lupus erythematosus, cutaneous lupus erythematosus, ulcerative colitis, cystic fibrosis, asthma, multiple sclerosis and psoriasis <sup>[1]</sup> .
<b>In Vitro</b>	PAD-IN-2 (Example-57, 1 h) inhibits PAD4 activity with an IC <sub>50</sub> value <1 μM (determined by ammonia release biochemical assay) <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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## REFERENCES

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[1]. Hallur, Gurulingappa, et al. Heterocyclic compounds as pad4 inhibitors. Patent WO2019058393 A1.

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

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