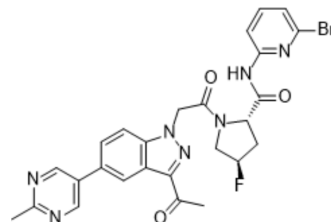


## Danicopan

<b>Cat. No.:</b>	HY-117930		
<b>CAS No.:</b>	1903768-17-1		
<b>Molecular Formula:</b>	C <sub>26</sub> H <sub>23</sub> BrFN <sub>7</sub> O <sub>3</sub>		
<b>Molecular Weight:</b>	580.41		
<b>Target:</b>	Complement System		
<b>Pathway:</b>	Immunology/Inflammation		
<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 : 125 mg/mL (215.37 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	<b>Preparing Stock Solutions</b>	1 mM	1.7229 mL	8.6146 mL	17.2292 mL
		5 mM	0.3446 mL	1.7229 mL	3.4458 mL
10 mM		0.1723 mL	0.8615 mL	1.7229 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: ≥ 2.08 mg/mL (3.58 mM); Clear solution  2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (3.58 mM); Clear solution				

### BIOLOGICAL ACTIVITY

<b>Description</b>	Danicopan (ACH-4471), a selective and orally active small-molecule factor D inhibitor, shows high binding affinity to human Factor D with K <sub>d</sub> value of 0.54 nM. Danicopan (ACH-4471) inhibits alternative pathway of complement (APC) activity, has potential to block the alternative pathway of complement in paroxysmal nocturnal hemoglobinuria (PNH) and atypical hemolytic uremic syndrome (aHUS) <sup>[1]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	Kd: 0.54 nM (Factor D) <sup>[1]</sup>
<b>In Vitro</b>	Danicopan (ACH-4471) inhibits the proteolytic activity of purified Factor D against its natural substrate Factor B in complex with C3b, blocking production of Bb fragment in a dose-dependent manner with an IC <sub>50</sub> value of 0.015 μM <sup>[1]</sup> . ?Danicopan (ACH-4471) potently inhibits hemolysis with IC <sub>50</sub> values ranging from 0.0040 μM to 0.027 μM (IC <sub>90</sub> values from

---

0.015  $\mu\text{M}$  to 0.11  $\mu\text{M}$ )<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

---

## CUSTOMER VALIDATION

- Front Immunol. 2021 Jun 10;12:690821.
- Cancers (Basel). 2022, 14(2), 305.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

[1]. Boyer DD, Ko YP, Podos SD, et al. Danicopan, an Oral Complement Factor D Inhibitor, Exhibits High and Sustained Exposure in Ocular Tissues in Preclinical Studies. Transl Vis Sci Technol. 2022;11(10):37.

[2]. Yuan X, et al. Small-molecule factor D inhibitors selectively block the alternative pathway of complement in paroxysmal nocturnal hemoglobinuria and atypical hemolytic uremic syndrome. Haematologica. 2017 Mar;102(3):466-475.

---

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA