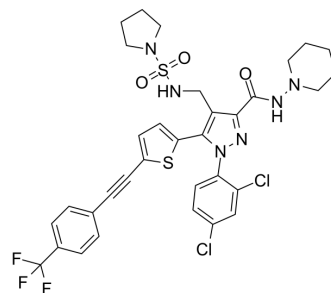


## CB1-IN-1

<b>Cat. No.:</b>	HY-12790		
<b>CAS No.:</b>	1429239-98-4		
<b>Molecular Formula:</b>	C <sub>33</sub> H <sub>31</sub> Cl <sub>2</sub> F <sub>3</sub> N <sub>6</sub> O <sub>3</sub> S <sub>2</sub>		
<b>Molecular Weight:</b>	751.67		
<b>Target:</b>	Cannabinoid Receptor		
<b>Pathway:</b>	GPCR/G Protein; Neuronal Signaling		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



## SOLVENT & SOLUBILITY

### In Vitro

DMSO : 125 mg/mL (166.30 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	1.3304 mL	6.6519 mL	13.3037 mL
	5 mM	0.2661 mL	1.3304 mL	2.6607 mL
	10 mM	0.1330 mL	0.6652 mL	1.3304 mL

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

### In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: ≥ 2.08 mg/mL (2.77 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 2.08 mg/mL (2.77 mM); Clear solution

## BIOLOGICAL ACTIVITY

### Description

CB1-IN-1 (BPRCB1184) is a peripherally restricted CB1R antagonist, with K<sub>i</sub> of 0.3 nM and 21 nM for CB1R (EC<sub>50</sub> = 3 nM) and CB2R, respectively. IC<sub>50</sub> value: 0.3 nM (K<sub>i</sub>, CB1R) 21 nM (K<sub>i</sub>, CB2R) Target: CB1R in vivo: CB1-IN-1 is a novel peripherally restricted cannabinoid 1 receptor antagonist with significant weight-loss efficacy in diet-induced obese mice. CB1-IN-1 has great potential to ameliorate this related metabolic syndrome.

## REFERENCES

- [1]. Chang CP, et al. Discovery of 1-(2,4-dichlorophenyl)-N-(piperidin-1-yl)-4-((pyrrolidine-1-sulfonamido)methyl)-5-(5-((4-(trifluoromethyl)phenyl)ethynyl)thiophene-2-yl)-

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

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