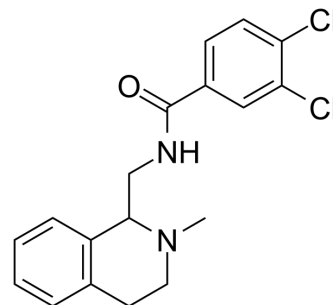


BPR1M97

Cat. No.:	HY-128865		
CAS No.:	2059904-66-2		
Molecular Formula:	C ₁₈ H ₁₈ Cl ₂ N ₂ O		
Molecular Weight:	349.25		
Target:	Opioid Receptor		
Pathway:	GPCR/G Protein; Neuronal Signaling		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro	DMSO : 250 mg/mL (715.82 mM; Need ultrasonic)			
		Solvent Concentration	Mass	
			1 mg	5 mg
			10 mg	
Preparing Stock Solutions	1 mM	2.8633 mL	14.3164 mL	28.6328 mL
	5 mM	0.5727 mL	2.8633 mL	5.7266 mL
	10 mM	0.2863 mL	1.4316 mL	2.8633 mL
Please refer to the solubility information to select the appropriate solvent.				
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (5.96 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (5.96 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (5.96 mM); Clear solution 			

BIOLOGICAL ACTIVITY

Description	BPR1M97 is a dual-acting mu opioid receptor (MOP) and nociceptin-orphanin FQ peptide (NOP) receptor agonist with K _i values of 1.8 and 4.2 nM, respectively. BPR1M97 shows high potency and blood-brain barrier penetration, and produces potent antinociceptive effects ^[1] .
IC₅₀ & Target	K _i : 1.8 nM (MOP), 4.2 nM (NOP) ^[1]
In Vivo	BPR1M97 (1.8 mg/kg; s.c.; once) demonstrates antinociception in a murine model of cancer pain ^[1] .

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

Animal Model:	Male wild-type C57BL/6 mice (25-30 g) ^[1]
Dosage:	1.8 mg/kg
Administration:	Subcutaneous injection (s.c.); once
Result:	Demonstrated antinociception in a murine model of cancer pain.

REFERENCES

[1]. Chao PK, et al. BPR1M97, a dual mu opioid receptor/nociceptin-orphanin FQ peptide receptor agonist, produces potent antinociceptive effects with safer properties than morphine. *Neuropharmacology*. 2019 Jul 3:107678.

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

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