Bevenopran

Cat. No.: HY-100122

CAS No.: 676500-67-7

Molecular Formula: $C_{20}H_{26}N_4O_4$

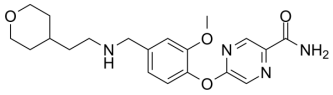
Molecular Weight: 386.44

Target: Opioid Receptor

Pathway: GPCR/G Protein; Neuronal Signaling

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 (323.47 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	2.5877 mL	12.9386 mL	25.8772 mL
5 mM	0.5175 mL	2.5877 mL	5.1754 mL
10 mM	0.2588 mL	1.2939 mL	2.5877 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.08 mg/mL (5.38 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.08 mg/mL (5.38 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (5.38 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Bevenopran is a peripheral μ-opioid receptor antagonist[1][2].

IC_{50} & Target

μ-opioid receptor[1]

In Vivo

Bevenopran is a peripheral μ-opioid receptor antagonist. Bevenopran is currently under investigation for the treatment of opioid-induced bowel dysfunction (OBD)[1]. Bevenopran tends to increase bowel movement (BM) frequency, especially for 0.1 mg twice daily and 4 mg daily, respectively[1].

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

REFERENCES

[1]. Diego L, et al. Novel opioid antagonists for opioid-induced bowel dysfunction. Expert Opin Investig Drugs. 2011 Aug;20(8):1047-56.

[2]. Siemens W, et al. Advances in pharmacotherapy for opioid-induced constipation - a systematic review. Expert Opin Pharmacother. 2015 Mar;16(4):515-32.

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