

BAN ORL 24 dihydrochloride

Chemical Properties

CAS No. : 1401463-54-4

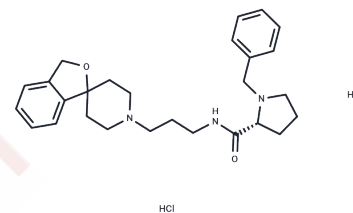
Formula: C₂₇H₃₇Cl₂N₃O₂

Molecular Weight: 506.51

Storage: Keep away from direct sunlight, Store at low temperature

Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



Biological Description

Description	BAN ORL 24 is a highly potent nociceptin/orphan FQ (N/OFQ) receptor (NOP) antagonist that can be used to study neurological diseases.
Targets(IC50)	Opioid Receptor
In vitro	BAN ORL 24 has antagonist for NOR (IC ₅₀ =50 μM) and MOR (opioid receptor subtype) (IC ₅₀ =0.224 μM). [1]
In vivo	BAN ORL 24 (10 mg/kg; i.v.) attenuated the duration of the thermal nociceptive antisensitization effect of BPR1M97 and inhibited BPR1M97-induced antinociceptive sensitization at 90 min postinjection. In tail-clip testing, BAN ORL 24 did not attenuate BPR1M97-induced antinociceptive sensitization at 30 min postinjection. [2]

Solubility Information

Solubility	H ₂ O: 80 mg/mL (157.94 mM), Sonication is recommended. DMSO: 180 mg/mL (355.37 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 5 mg/mL (9.87 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9743 mL	9.8715 mL	19.7429 mL
5 mM	0.3949 mL	1.9743 mL	3.9486 mL
10 mM	0.1974 mL	0.9871 mL	1.9743 mL
50 mM	0.0395 mL	0.1974 mL	0.3949 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Hou T, et al. Label-free cell phenotypic study of opioid receptors and discovery of novel mu opioid ligands from natural products. *J Ethnopharmacol.* 2021 Apr 24;270:113872.

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.* 2020 Apr;166:107678.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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