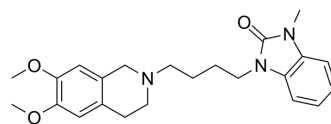


CM398

Cat. No.:	HY-145628		
CAS No.:	1121931-70-1		
Molecular Formula:	C ₂₃ H ₂₉ N ₃ O ₃		
Molecular Weight:	395.49		
Target:	Sigma 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 : 250 mg/mL (632.13 mM; Need ultrasonic)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.5285 mL	12.6425 mL	25.2851 mL
	5 mM	0.5057 mL	2.5285 mL	5.0570 mL
	10 mM	0.2529 mL	1.2643 mL	2.5285 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 (5.26 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.08 mg/mL (5.26 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.08 mg/mL (5.26 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

CM398 is a highly selective, orally active sigma-2 receptor ligand ($K_i=0.43$ nM), with high sigma-1/sigma-2 selectivity ratio (1000-fold). CM398 shows notable affinity for dopamine ($K_i=32.90$ nM) and serotonin transporters ($K_i=244.2$ nM). CM398 shows promising anti-inflammatory analgesic effects in the formalin model of inflammatory pain in mice^[1].

REFERENCES

[1]. Intagliata S, et al. Discovery of a Highly Selective Sigma-2 Receptor Ligand, 1-(4-(6,7-Dimethoxy-3,4-dihydroisoquinolin-2(1H)-yl)butyl)-3-methyl-1H-benzo[d]imidazol-2(3H)-one (CM398), with Drug-Like Properties and Antinociceptive Effects In Vivo. AAPS J. 2020;22(5):94. Published 2020 Jul 20.

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

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