VUF10166

Cat. No.: HY-100552

CAS No.: 155584-74-0

Molecular Formula: $C_{13}H_{15}ClN_4$

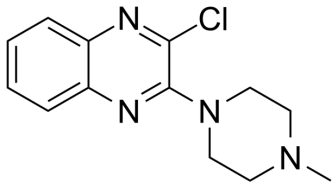
Molecular Weight: 262.74

Target: 5-HT Receptor

Pathway: GPCR/G Protein; Neuronal Signaling

Storage: 4°C, protect from light

* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (380.60 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	3.8060 mL	19.0302 mL	38.0604 mL
	5 mM	0.7612 mL	3.8060 mL	7.6121 mL
	10 mM	0.3806 mL	1.9030 mL	3.8060 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: ≥ 2.5 mg/mL (9.52 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (9.52 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (9.52 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

VUF10166 is a potent and high-affinity 5-HT_3 receptor antagonist, with K_i values of 0.04 nM (5-HT_3A) and 22 nM (5-HT_3AB). VUF10166 inhibits 5-HT-induced responses at 5-HT_3A and 5-HT_3AB receptors at nanomolar concentrations. At 5-HT_3 receptor, VUF10166 at higher concentrations also acts as a partial agonist, with an EC_{50} of 5.2 μM[1].

IC_{50} & Target		
	5-HT_{3A} Receptor 0.04 nM (Ki)	5-HT_3 AB 22 nM (Ki)

REFERENCES

[1]. Thompson AJ, et al. VUF10166, a novel compound with differing activities at 5-HT_3A and 5-HT_3AB receptors. J Pharmacol Exp Ther. 2012 May;341(2):350-9.

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