

# Vofopitant

**Catalog No: tcsc0003109**



## Available Sizes

**Size:** 5mg

**Size:** 10mg

**Size:** 25mg



## Specifications

**CAS No:**

168266-90-8

**Formula:**

$C_{21}H_{23}F_3N_6O$

**Pathway:**

Neuronal Signaling;GPCR/G Protein

**Target:**

Neurokinin Receptor;Neurokinin Receptor

**Purity / Grade:**

>98%

**Solubility:**

10 mM in DMSO

**Alternative Names:**

GR 205171

**Observed Molecular Weight:**

432.44

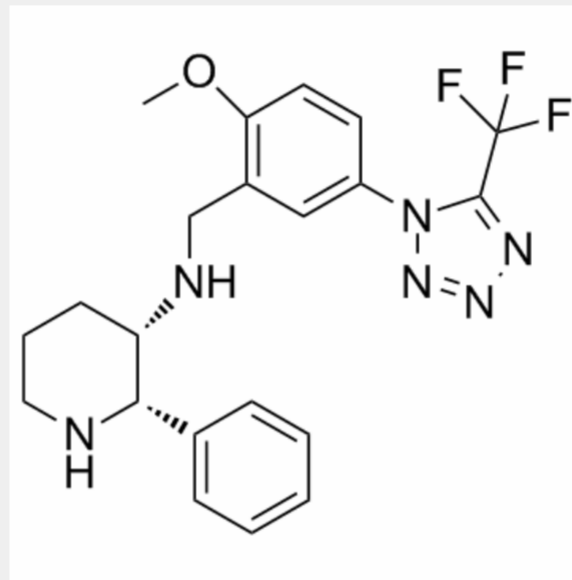
## Product Description

Vofopitant is potent **tachykinin NK<sub>1</sub> receptor** antagonist, with **pK<sub>i</sub>s** of 10.6, 9.5, and 9.8 for human, rat and ferret NK<sub>1</sub> receptor, respectively.

IC50 & Target: pK<sub>i</sub>: 10.6 (Human NK<sub>1</sub> receptor), 9.5 (Rat NK<sub>1</sub> receptor), 9.8 (Ferret NK<sub>1</sub> receptor)<sup>[1]</sup>

**In Vitro:** Vofopitant is potent tachykinin NK<sub>1</sub> receptor antagonist, with pK<sub>i</sub>s of 10.6, 9.5, and 9.8 for human, rat and ferret NK<sub>1</sub> receptor, respectively. Vofopitant less potently inhibits rat 5-HT<sub>1A</sub>, bovine 5-HT<sub>1D</sub>, rat 5-HT<sub>2A</sub>, rat Histamine H<sub>1</sub>, guinea-pig Histamine H<sub>2</sub> and rat Ca<sup>2+</sup> channel, with pK<sub>i</sub>s of 6.3, 6.6, 6.5, 6.5, 6.6, and 5.6, respectively. Vofopitant shows negligible affinity at NK<sub>2</sub> and NK<sub>3</sub>, with pIC<sub>50</sub> of [1]. GR205171 (300 μM) potentiates the effects of paroxetine on cortical [5-HT]ext, and inhibits paroxetine-induced increase in [5-HT]ext in the dorsal raphe nucleus<sup>[3]</sup>.

**In Vivo:** Vofopitant (GR205171, 30 mg/kg, s.c.) increases the number of choices of the 25-s delayed reward in a T-maze<sup>[2]</sup>. Vofopitant (GR205171, 30 mg/kg, i.p.) increases the extracellular 5-HT levels in the frontal cortex of paroxetine-treated wild-type mice, rather than in wild-type mice and paroxetine-treated NK<sub>1</sub> receptor knockout mice<sup>[3]</sup>.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!