

# Ocaperidone

**Catalog No: tcsc0020804**



## Available Sizes

**Size:** 5mg

**Size:** 10mg

**Size:** 50mg

**Size:** 100mg



## Specifications

**CAS No:**

129029-23-8

**Formula:**

$C_{24}H_{25}FN_4O_2$

**Pathway:**

GPCR/G Protein;Neuronal Signaling;Neuronal Signaling;GPCR/G Protein

**Target:**

Dopamine Receptor;Dopamine Receptor;5-HT Receptor;5-HT Receptor

**Purity / Grade:**

>98%

**Solubility:**

10 mM in DMSO

**Alternative Names:**

R79598

**Observed Molecular Weight:**

420.48

## Product Description

Ocaperidone is an effective antipsychotic agent, acting as a potent **5-HT<sub>2</sub>** and **dopamine D<sub>2</sub>** antagonist, and a **5-HT<sub>1A</sub>** agonist, with **K<sub>i</sub>**s of 0.14 nM, 0.46 nM, 0.75 nM, 1.6 nM and 5.4 nM for 5-HT<sub>2</sub>, α<sub>1</sub>-adrenergic receptor, dopamine D<sub>2</sub>, histamine H<sub>1</sub> and α<sub>2</sub>-adrenergic receptor, respectively, and a **pEC<sub>50</sub>** and **pK<sub>i</sub>** of 7.60 and 8.08 for h5-HT<sub>1A</sub>.

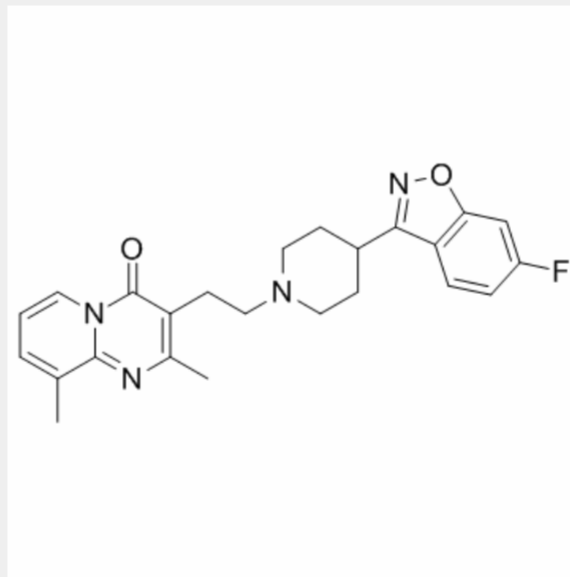
IC50 & Target: K<sub>i</sub>: 0.14 nM (5HT<sub>2</sub>), 0.46 nM (α<sub>1</sub>-adrenergic receptor), 0.75 nM (Dopamine D<sub>2</sub>), 1.6 nM (Histamine H<sub>1</sub>), 5.4 nM (α<sub>2</sub>-adrenergic receptor)<sup>[1]</sup>

pEC<sub>50</sub>: 7.60 (h5-HT<sub>1A</sub>)<sup>[2]</sup>

pK<sub>i</sub>: 8.08 (h5-HT<sub>1A</sub>)<sup>[2]</sup>

**In Vitro:** Ocaperidone has high affinity at 5-HT<sub>2</sub> and dopamine D<sub>2</sub>, with K<sub>i</sub>s of 0.14 nM, 0.46 nM, 0.75 nM, 1.6 nM and 5.4 nM for 5HT<sub>2</sub>, α<sub>1</sub>-adrenergic, dopamine D<sub>2</sub>, histamine H<sub>1</sub> and α<sub>2</sub>-adrenergic, respectively<sup>[1]</sup>. Ocaperidone shows 5-HT<sub>1A</sub> receptor agonist activity, with a pEC<sub>50</sub> and pK<sub>i</sub> of 7.60 and 8.08<sup>[2]</sup>.

**In Vivo:** Ocaperidone shows a potent occupation of 5HT<sub>2</sub> receptor via in vivo binding in the frontal cortex of rats with an ED<sub>50</sub> of 0.04 mg/kg, and 0.14-0.16 mg/kg for D<sub>2</sub> receptor in the striatum and the nucleus accumbens<sup>[1]</sup>. Ocaperidone (R 79598) antagonizes dopamine D<sub>2</sub> and 5-HT<sub>2</sub>, and shows a partial generalization to buspirone with an ED<sub>50</sub> of 0.163 mg/kg<sup>[3]</sup>.



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