

# Temanogrel

**Catalog No: tcsc0002653**



## Available Sizes

**Size:** 1mg

**Size:** 5mg

**Size:** 10mg



## Specifications

**CAS No:**

887936-68-7

**Formula:**

$C_{24}H_{28}N_4O_4$

**Pathway:**

Neuronal Signaling;GPCR/G Protein

**Target:**

5-HT Receptor;5-HT Receptor

**Purity / Grade:**

>98%

**Solubility:**

DMSO : 125 mg/mL (286.37 mM; Need ultrasonic)

**Alternative Names:**

APD791

**Observed Molecular Weight:**

436.5

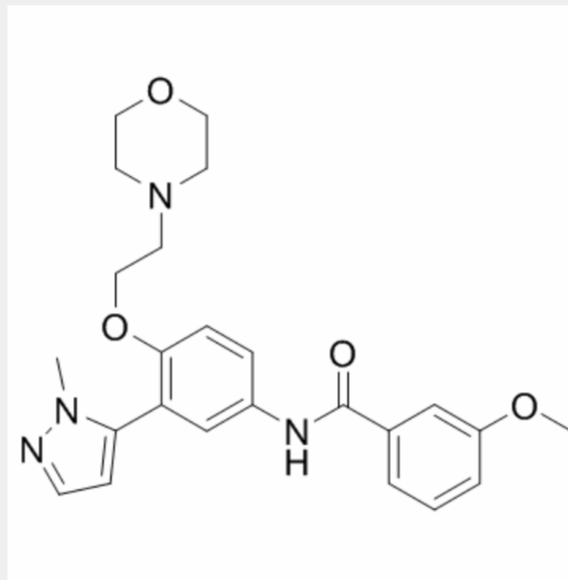
## Product Description

Temanogrel is a highly selective **5-HT<sub>2A</sub> receptor** antagonist with a **K<sub>i</sub>** of 4.9 nM.

IC<sub>50</sub> & Target: K<sub>i</sub>: 4.9 nM (5-HT<sub>2A</sub> receptor)

**In Vitro:** Temanogrel is a highly selective 5-HT<sub>2A</sub> receptor antagonist with a K<sub>i</sub> of 4.9 nM. Temanogrel inhibits inositol phosphate accumulation with an IC<sub>50</sub> of 5.2 nM. Temanogrel exhibits potent inhibition of serotonin mediated amplification of ADP-stimulated human and dog platelet aggregation (IC<sub>50</sub>=8.7 and 23.1 nM, respectively)<sup>[1]</sup>. Pretreatment of aortic rings with Temanogrel prevents the vasoconstriction caused by 20 μM 5-HT in a concentration-dependent manner. Preincubation with Temanogrel also significantly inhibits the 5-HT-stimulated DNA synthesis with an IC<sub>50</sub> of 13±7 nM<sup>[3]</sup>.

**In Vivo:** There are no differences in heart rate or mean arterial pressure between saline-treated and Temanogrel-treated groups at any time during the experiment (that is, for mean arterial pressure, P=0.508 between groups, and P=0.540 for group-time interaction). In dogs assigned to receive Temanogrel, plasma Temanogrel levels show a rapid and sustained increase, averaging 25.5±4.1, 28.7±4.6 and 31.2±4.5 ng/mL, respectively, at 10 min, 1.25 h and 2.25 h after the start of treatment<sup>[3]</sup>.



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