Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

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

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Temanogrel is a highly selective **5-HT$_{2A}$ receptor** antagonist with a **K$_i$** of 4.9 nM.

IC50 & Target: Ki: 4.9 nM (5-HT$_{2A}$ receptor)

In Vitro: Temanogrel is a highly selective 5-HT$_{2A}$ receptor antagonist with a K$_i$ of 4.9 nM. Temanogrel inhibits inositol phosphate accumulation with an IC$_{50}$ of 5.2 nM. Temanogrel exhibits potent inhibition of serotonin mediated amplification of ADP-stimulated human and dog platelet aggregation (IC$_{50}$=8.7 and 23.1 nM, respectively)[1]. 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$_{50}$ of 13±7 nM[3].

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[3].