

A 438079

Catalog No: tcsc1293



Available Sizes

Size: 10mg

Size: 50mg



Specifications

CAS No:

899507-36-9

Formula:

$C_{13}H_9Cl_2N_5$

Pathway:

Membrane Transporter/Ion Channel

Target:

P2X Receptor

Purity / Grade:

>98%

Solubility:

H₂O : 0.2 mg/mL (0.65 mM; Need ultrasonic)

Observed Molecular Weight:

306.15

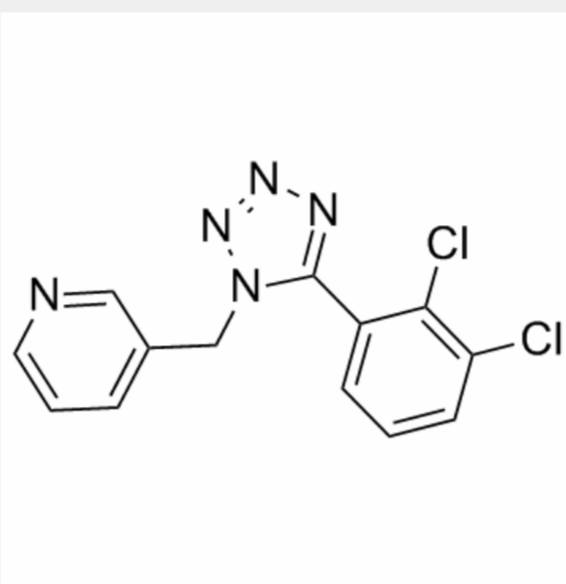
Product Description

A 438079 is a potent, and selective **P2X₇ receptor** antagonist with pIC₅₀ of 6.9.

IC₅₀ & Target: pIC₅₀: 6.9 (P2X₇ receptor)

In Vitro: In 1321N1 cells stably expressing rat P2X₇ receptors, A 438079 blocks BzATP-(10 μM) evoked changes in intracellular calcium concentrations with an IC₅₀ of 321 nM. A 438079 is also selective for the P2X₇ receptor, at concentrations up to 100 μM^[1].

In Vivo: A 438079 (80 $\mu\text{mol/kg}$, i.v.) reduces noxious and innocuous evoked activity of different classes of spinal neurons in neuropathic rats. A 438079 (100 and 300 $\mu\text{mol/kg}$, i.p.) significantly raises withdrawal thresholds in both the SNL and CCI models^[1]. Intraperitoneal injection of A 438079 (5 and 15 mg/kg) 60 min after triggering seizures reduces seizure severity and neuronal death within the hippocampus. A 438079 has superior neuroprotective effects compared with an equally dose of phenobarbital (25 mg/kg) ^[2]. A 438079 partially but significantly prevents the 6-OHDA-induced depletion of striatal DA stores^[3]. Pretreatment with A 438079 reduces nociceptive behaviour scores in the HC model^[4].



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