

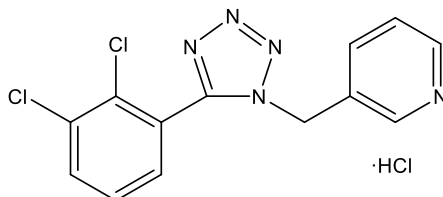
**Catalog # 10-4063**

**A-438079 HCl**

CAS# 899431-18-6

3-[5-(2,3-Dichlorophenyl)tetrazol-1-ylmethyl]pyridine hydrochloride

Lot # FBS2152



A-438079 (899431-18-6) is a competitive P2X7 receptor antagonist (pIC<sub>50</sub> = 6.9).<sup>1</sup> Displayed antinociceptive effects in a rat model of neuropathic pain.<sup>2</sup> A-438079 prevented the LPS-induced release of IL-1 $\beta$  and attenuated LPS-induced (*via* intrathecal lumbar injection) mechanical hyperalgesia in rat hindpaws.<sup>3</sup> It prevented mechanical hyperalgesia following peripheral nerve injury.<sup>4</sup> A-438079 protected against cerebral ischemia/reperfusion injury in a rat model via reduction of the neuroinflammatory response.<sup>5</sup>

- 1) Nelson *et al.* (2006) *Structure-activity relationship studies on a series of novel, substitutes 1-benzyl-5-phenyltetrazole P2X7 antagonists*; J. Med. Chem. **49** 3659
- 2) McGaraughty *et al.* (2007) *P2X7-related modulation of pathological nociception in rats*; Neuroscience **146** 1817
- 3) Clark *et al.* (2010) *P2X7-dependent release of interleukin-1beta and nociception in the spinal cord following lipopolysaccharide*; J. Neurosci. **30** 573
- 4) Kobayashi *et al.* (201) *Induction of the P2X7 receptor in spinal microglia in a neuropathic pain model*; Neurosci. Lett. **504** 57
- 5) Chu *et al.* (2012) *Inhibition of P2X7 receptor ameliorates transient global cerebral ischemia/reperfusion injury via modulating inflammatory responses in the rat hippocampus*; J. Neuroinflammation **9** 69

**PHYSICAL DATA**

Molecular Weight:	342.61
Molecular Formula:	C <sub>13</sub> H <sub>9</sub> Cl <sub>2</sub> N <sub>5</sub> ·HCl
Purity:	>98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (>25 mg/ml)
Physical Description:	White to off-white solid
Storage and Stability:	Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 1 month.

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