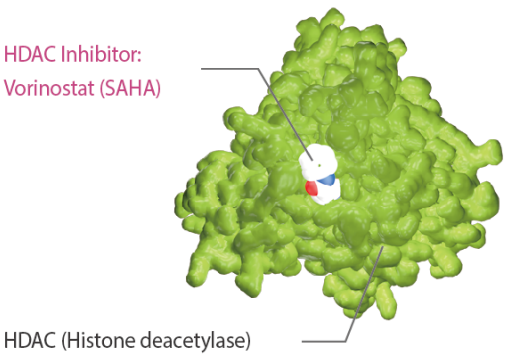
P2X Receptor

P2XRs



P2X receptors are a family of cation-permeable ligand gated ion channels that open in response to the binding of extracellular adenosine 5'-triphosphate (ATP). They belong to a larger family of receptors known as the purinergic receptors. P2X receptors are present in a diverse array of organisms including humans, mouse, rat, rabbit, chicken, zebrafish, bullfrog, fluke, and amoeba. seven separate genes coding for P2X subunits have been identified, and named to as P2X1 through P2X7. The pharmacology of a given P2X receptor is largely determined by its subunit makeup. Different subunits exhibit different sensitivities to purinergic agonists and antagonists. Of continuing interest is the fact that some P2X receptors (P2X2, P2X4, human P2X5, and P2X7) exhibit multiple open states in response to ATP, characterized by a time-dependent increase in the permeabilities of large organic ions and nucleotide binding dyes.

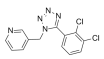
P2X Receptor Inhibitors & Modulators

A 438079

Cat. No.: HY-15488

Bioactivity: A 438079 is a potent, and selective **$P2X_7$ receptor** antagonist with pIC $_{50}$ of 6.9.

Purity: 99.64%
Clinical Data: No Development Reported
Size: 10 mg, 50 mg

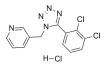


A 438079 (hydrochloride)

Cat. No.: HY-15488A

Bioactivity: A 438079 (hydrochloride) is a potent, and selective **$P2X_7$ receptor** antagonist with pIC $_{50}$ of 6.9.

Purity: 99.88%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water,
10 mg, 50 mg

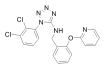


A 839977

Cat. No.: HY-13954

Bioactivity: A-839977 is a novel and selective P2X7 antagonist; blocks BzATP-evoked calcium influx at recombinant human, rat and mouse P2X7 receptors (IC50 values are 20, 42 and 150 nM respectively).

Purity: 98.05%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
10 mg, 50 mg

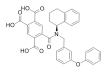


A-317491

Cat. No.: HY-15568

Bioactivity: A-317491 is a non-nucleotide P2X3 and P2X2/3 receptor antagonist, which inhibits calcium flux mediated by the receptors. IC50 value: Target: P2X2/3 It is known that P2X3 and P2X2/3 receptors stimulate the pronociceptive effects of ATP upon activation. Studies indicate that the P2X3 receptor...

Purity: 99.18%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg

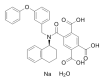


A-317491 sodium salt hydrate

Cat. No.: HY-15568A

Bioactivity: A-317491 is a non-nucleotide P2X3 and P2X2/3 receptor antagonist, which inhibits calcium flux mediated by the receptors. IC50 value: Target: P2X2/3 receptor It is known that P2X3 and P2X2/3 receptors stimulate the pronociceptive effects of ATP upon activation. Studies indicate that the P2X3...

Purity: 99.65%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water,
5 mg, 10 mg, 50 mg

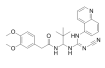


A-740003

Cat. No.: HY-50697

Bioactivity: A-740003 is a potent, selective and competitive **P2X7 receptor** antagonist with **IC_{50}** values are 18 and 40 nM for rat and human P2X7 receptors, respectively.

Purity: 98.91%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
10 mg, 50 mg, 100 mg

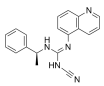


A-804598

Cat. No.: HY-100483

Bioactivity: A-804598 is a novel, competitive, and selective P2X7 receptor antagonist with IC50 of 10 nM, 9 nM and 11 nM in rat, mouse and human P2X7 receptors respectively. In vitro: A-804598 potently blocked IL-1β release in the THP-1 cells (IC50 of 8.5 nM). A-804598 also blocked agonist-evoked pore formation in...

Purity: 98.83%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 25 mg, 50 mg, 100 mg



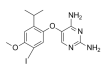
AF-353

(Ro-4)

Cat. No.: HY-14483

Bioactivity: AF-353 is a novel, potent and orally bioavailable P2X3/P2X2/3 receptor antagonist, inhibits human and rat P2X3 (pIC50= 8.0).

Purity: 98.95%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg

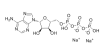


ATP disodium salt (Disodium adenosine triphosphate; Adenosine 5'-triphosphate disodium salt)

Cat. No.: HY-B0345A

Bioactivity: ATP is a phosphate-group donor for substrate activation in metabolic reactions and the coenzyme for a large number of kinases.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water,
1 g, 5 g

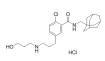


AZD9056 hydrochloride

Cat. No.: HY-19427A

Bioactivity: AZD9056 is a selective orally active inhibitor of **P2X7** which plays a significant role in inflammation and pain-causing diseases.

Purity: 98.10%
Clinical Data: Phase 2
Size: 10mM x 1mL in DMSO,
1 mg, 5 mg, 10 mg, 50 mg, 100 mg



Tel: 609-228-6898 Fax: 609-228-5909 Email: sales@MedChemExpress.com

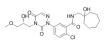
CE-224535

(PF-04905428)

Cat. No.: HY-15487

Bioactivity: CE-224535 is a selective **$P2X_7$ receptor** antagonist.

Purity: >98%
Clinical Data: Phase 2
Size: 1 mg, 5 mg, 10 mg



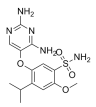
Gefapixant

(AF219; MK-7264)

Cat. No.: HY-101588

Bioactivity: Gefapixant is an orally active P2X3 receptor (**P2X3R**) antagonist with IC_{50}s of ~30 nM versus recombinant hP2X3 homotrimers and 100-250 nM at hP2X2/3 heterotrimeric receptors.

Purity: 99.62%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 25 mg, 50 mg, 100 mg

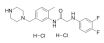


GW791343 dihydrochloride

Cat. No.: HY-15469

Bioactivity: GW791343 2Hcl is a P2X7 allosteric modulator; exhibits species-specific activity and acts as a negative allosteric modulator of human P2X7 (pIC50 = 6.9 - 7.2).

Purity: 94.07%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg

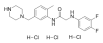


GW791343 trihydrochloride

Cat. No.: HY-15470

Bioactivity: GW791343 3Hcl is a P2X7 allosteric modulator; exhibits species-specific activity and acts as a negative allosteric modulator of human P2X7 (pIC50 = 6.9 - 7.2).

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 50 mg

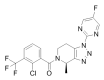


JNJ-54175446

Cat. No.: HY-117508

Bioactivity: JNJ-54175446 is a potent and selective brain penetrant **P2X7 receptor** antagonist, with **pIC_{50}**s of 8.46 and 8.81 for hP2X7 receptor and rP2X7 receptor, respectively.

Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg, 250 mg

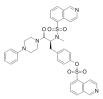


KN-62

Cat. No.: HY-13290

Bioactivity: KN-62 is a selective and potent inhibitor of calmodulin-dependent protein kinase Ⅱ (**CaMK-II**) with **IC_{50}** of 0.9 μM, KN-62 also displays noncompetitive antagonism at **$P2X_7$** receptors in HEK293 cells, with an **IC_{50}** value...

Purity: 99.16%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg



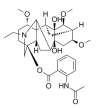
Lappaconitine

((+)-Lappaconitine)

Cat. No.: HY-N0383

Bioactivity: Lappaconitine, isolated from Aconitum sinomontanum Nakai, was characterized as analgesic principle.

Purity: >98%
Clinical Data: No Development Reported
Size: 10 mg, 50 mg, 100 mg



PSB-12062

(N-(p-Methylphenylsulfonyl)phenoxazine)

Cat. No.: HY-101910

Bioactivity: PSB-12062 is a potent and selective **P2X4** antagonist with an **IC_{50}** of 1.38 μM for human P2X4.

Purity: 98.45%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 25 mg, 50 mg, 100 mg