



AZD9056 (hydrochloride)

Catalog No: tcsc6172

Available Sizes
Size: 1mg
Size: 5mg
Size: 10mg
Size: 50mg
Size: 100mg
Specifications
CAS No: 345303-91-5
Formula: $C_{24}^{H}_{36}^{Cl}_{2}^{N}_{2}^{O}_{2}$
Pathway: Membrane Transporter/Ion Channel
Target: P2X Receptor
Purity / Grade: >98%
Solubility: DMSO : ≥ 34 mg/mL (74.65 mM)
Observed Molecular Weight: 455.46





Product Description

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

In Vitro: The antagonist AZD9056 blocks P2X7 receptors with an IC $_{50}$ of 11.2 nM in HEK-hP2X7 cell line, indicating a high selectivity of the antagonist for the P2X7 receptor. The P2X7-receptor antagonist AZD9056 has a clear inhibitory effect (IC $_{50}$ =1-3 μ M) in mouse microglia BV2 cells^[1]. AZD9056 is an inhibitor of BCRP and weakly inhibits BCRP-mediated transport of methotrexate (IC $_{50}$ =92 μ M)^[2]

In **Vivo:** Treatment with AZD9056 exerts pain-relieving and anti-inflammatory effects. The upregulated expression of interleukin (IL)- 1β , IL-6, tumor necrosis factor- α (TNF- α), matrix metalloproteinase-13 (MMP-13), substance P (SP) and prostaglandin E2 (PGE2) which is induced by MIA in cartilage tissues is reversed by AZD9056^[3].

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