

AZD9056 (hydrochloride)

Catalog No: tcsc6172



Available Sizes

Size: 1mg

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg



Specifications

CAS No:

345303-91-5

Formula:

$C_{24}H_{36}Cl_2N_2O_2$

Pathway:

Membrane Transporter/Ion Channel

Target:

P2X Receptor

Purity / Grade:

>98%

Solubility:

DMSO : ≥ 34 mg/mL (74.65 mM)

Observed Molecular Weight:

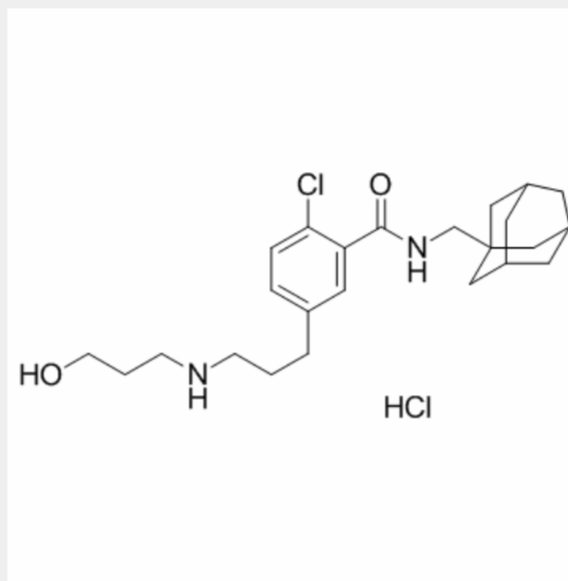
455.46

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 ($IC_{50}=1-3 \mu M$) in mouse microglia BV2 cells^[1]. AZD9056 is an inhibitor of BCRP and weakly inhibits BCRP-mediated transport of methotrexate ($IC_{50}=92 \mu M$)^[2].

In Vivo: Treatment with AZD9056 exerts pain-relieving and anti-inflammatory effects. The upregulated expression of interleukin (IL)-1 β , 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!