

Hydroxyfasudil (hydrochloride)

Catalog No: tcsc1600



Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg



Specifications

CAS No:

155558-32-0

Formula:

$C_{14}H_{18}ClN_3O_3S$

Pathway:

TGF-beta/Smad;Stem Cell/Wnt;Cell Cycle/DNA Damage

Target:

ROCK;ROCK;ROCK

Purity / Grade:

>98%

Solubility:

DMSO : 30 mg/mL (87.25 mM; Need ultrasonic)

Alternative Names:

HA-1100 hydrochloride;HA 1100 hydrochloride;HA1100 hydrochloride

Observed Molecular Weight:

343.83

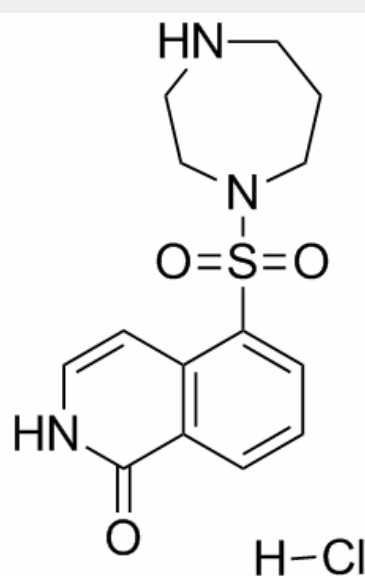
Product Description

Hydroxyfasudil hydrochloride is a **ROCK** inhibitor, with **IC₅₀**s of 0.73 and 0.72 μM for **ROCK1** and **ROCK2**, respectively.

IC50 & Target: IC50: 0.73 μM (ROCK1), 0.72 μM (ROCK2)^[1]

In Vitro: Hydroxyfasudil hydrochloride is a ROCK inhibitor, with **IC₅₀**s of 0.73 and 0.72 μM for ROCK1 and ROCK2, respectively. Hydroxyfasudil also less potently inhibits PKA, with an **IC₅₀** of 37 μM , 50-fold higher than those of the ROCKs. Hydroxyfasudil increases eNOS mRNA levels, with an **EC₅₀** value of $0.8 \pm 0.3 \mu\text{M}$. Hydroxyfasudil (0-100 μM) concentration-dependently increases eNOS activity and stimulates NO production in human aortic endothelial cells (HAEC). Hydroxyfasudil (10 μM) increases the half-life of eNOS mRNA from 13 to 16 hours, but does not affect eNOS promoter activity at concentrations from 0.1 to 100 μM ^[1].

In Vivo: Hydroxyfasudil (10 mg/kg, i.p.) significantly increases both the average and maximal voided volumes in SD rats. Hydroxyfasudil also significantly decreases the maximal detrusor pressure^[2]. Hydroxyfasudil (3 mg/kg, i.p) inhibits hypercontractility induced by norepinephrine in spontaneously hypertensive rats (SHRs). Furthermore, Hydroxyfasudil (3, 10 mg/kg, i.p) significantly ameliorates decreased penile cGMP contents in rats^[3].



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