Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Hydroxyfasudil

Catalog No: tcsc1599

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Specifications

CAS No:
105628-72-6

Formula:
$C_{14}H_{17}N_3O_3S$

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

Target:
ROCK;ROCK;ROCK

Purity / Grade:
>98%

Solubility:
DMSO : ≥ 31 mg/mL (100.86 mM)

Alternative Names:
HA-1100

Observed Molecular Weight:
307.37

Product Description

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Hydroxyfasudil is a **ROCK** inhibitor, with **IC_{50}**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 is a ROCK inhibitor, with IC_{50}s of 0.73 and 0.72 μM for ROCK1 and ROCK2, respectively. Hydroxyfasudil also less potently inhibits PKA, with an IC_{50} of 37 μM, 50-fold higher than those of the ROCKs. Hydroxyfasudil increases eNOS mRNA levels, with an EC_{50} value of 0.8 ± 0.3 μM. 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].