Web: www.taiclone.com
Tel: +886-2-2735-9682
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Azaindole 1

Catalog No: tcsc0341

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
867017-68-3

Formula:
$C_{18}H_{13}ClF_2N_6O$

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

Target:
ROCK;ROCK;ROCK

Purity / Grade:
>98%

Solubility:
10 mM in DMSO

Alternative Names:
ROCK inhibitor;TC-S 7001

Observed Molecular Weight:
402.79

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Product Description

Azaindole 1 is a highly potent inhibitor of human **ROCK-1** and **ROCK-2**, with **IC_{50}**s of 0.6 and 1.1 nM, respectively, and also inhibits murine **ROCK-2** or rat **ROCK-2** with **IC_{50}**s of 2.4 and 0.8 nM, respectively.

IC50 & Target: IC50: 0.6 nM (Human ROCK-1), 1.1 nM (Human ROCK-2), 2.4 nM (Murine ROCK-2), 0.8 nM (Rat ROCK-2)[1]

In Vitro: Azaindole 1 is a highly potent inhibitor of human ROCK-1 and ROCK-2, with IC_{50}s of 0.6 and 1.1 nM, respectively, and also inhibits murine ROCK-2 or rat ROCK-2 with IC_{50}s of 2.4 and 0.8 nM, respectively. Azaindole 1 also inhibits receptor tyrosine kinases TRK and FLT3, with IC_{50}s of 252 and 303 nM, respectively, but shows slight inhibition of MLCK and ZIP-kinase with IC_{50}s of 7.4 μM and 4.1 μM, respectively. Azaindole 1 induces vasorelaxation in vitro, and suppresses the phenylephrine-induced contraction of rabbit saphenous artery in a concentration dependent manner with an IC_{50} value of 65 nM[1].

In Vivo: Azaindole 1 (0.03, 0.1, 0.3 mg/kg, i.v.) results in a dose-dependent and long-lasting decrease in blood pressure in anaesthetized normotensive rats. Azaindole 1 (3 and 10 mg/kg, p.o.) decreases blood pressure dose-dependently and persistently both in normotensive and hypertensive rats, and shows such effects even at 1 mg/kg in hypertensive rats. Azaindole 1 (0.1 and 0.3 mg/kg, i.v. bolus injections) causes decreased mean arterial blood pressure in a dose-related manner and only leads to a moderate and dose-independent increase in heart rate of anaesthetized dogs[1].