

# Azaindole 1

**Catalog No: tcsc0341**



## Available Sizes

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**Size:** 5mg

**Size:** 10mg

**Size:** 50mg

**Size:** 100mg



## Specifications

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**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

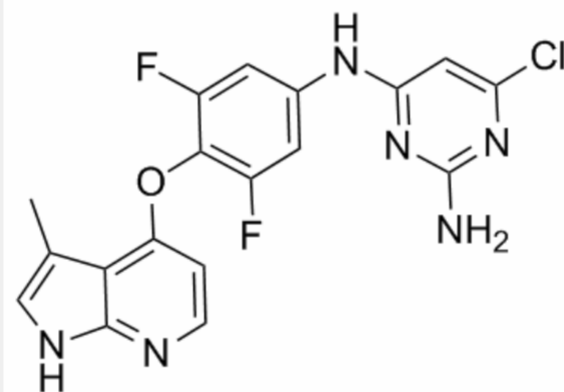
## Product Description

Azaindole 1 is a highly potent inhibitor of human **ROCK-1** and **ROCK-2**, with **IC<sub>50</sub>**s of 0.6 and 1.1 nM, respectively, and also inhibits murine **ROCK-2** or rat **ROCK-2** with **IC<sub>50</sub>**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)<sup>[1]</sup>

**In Vitro:** Azaindole 1 is a highly potent inhibitor of human ROCK-1 and ROCK-2, with **IC<sub>50</sub>**s of 0.6 and 1.1 nM, respectively, and also inhibits murine ROCK-2 or rat ROCK-2 with **IC<sub>50</sub>**s of 2.4 and 0.8 nM, respectively. Azaindole 1 also inhibits receptor tyrosine kinases TRK and FLT3, with **IC<sub>50</sub>**s of 252 and 303 nM, respectively, but shows slight inhibition of MLCK and ZIP-kinase with **IC<sub>50</sub>**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<sub>50</sub>** value of 65 nM<sup>[1]</sup>.

**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<sup>[1]</sup>.



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