



GSK429286A

Catalog No: tcsc0095

Available Sizes
Size: 5mg
Size: 10mg
Size: 25mg
Size: 50mg
Size: 100mg
Specifications
CAS No: 864082-47-3
Formula: $C_{21}^{H}_{16}^{F}_{4}^{N}_{4}^{O}_{2}$
Pathway: TGF-beta/Smad;Stem Cell/Wnt;Cell Cycle/DNA Damage
Target: ROCK;ROCK
Purity / Grade: >98%
Solubility: DMSO : ≥ 51 mg/mL (117.95 mM)
Observed Molecular Weight: 432.37



Product Description

GSK429286A is a selective inhibitor of **ROCK1** with an IC_{50} value of 14 nM.

IC50 & Target: IC50: 14 nM (ROCK1)[1].

In Vitro: GSK429286A at 1 μ M reduces ROCK2 activity over 20-fold, under conditions in which the only other kinase tested that is significantly inhibited is MSK1 whose activity is reduced ~5-fold. GSK429286A is a more selective ROCK2 inhibitor than the widely utilized ROCK inhibitor Y-27632 as assessed on kinase-specificity panel, and does not significantly inhibit LRRK2 even at doses as high as 30 μ M (500-fold higher than IC₅₀ of inhibition of ROCK2). GSK429286A slightly inhibits RSK and p70S6K with IC₅₀ of 0.78 μ M and 1.94 μ M, respectively. GSK429286A significantly inhibits rat aortic ring dilation with IC₅₀ of 190 nM^[2].

In Vivo: GSK429286A has 61% oral bioavailability in male Sprague-Dawley rats. Oral administration of GSK429286A at single doses of 3-30 mg/kg dramatically reduces mean arterial pressure in the spontaneously hypertensive rats (SHRs) in a dose-dependent manner, with a maximum decrease of 50 mmHg after approximately 2 hours treatment at dose of 30 mg/kg^[1].

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