

RKI-1447

Catalog No: tcsc1632



Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg



Specifications

CAS No:

1342278-01-6

Formula:

$C_{16}H_{14}N_4O_2S$

Pathway:

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

Target:

ROCK;ROCK;ROCK

Purity / Grade:

>98%

Solubility:

10 mM in DMSO

Observed Molecular Weight:

326.37

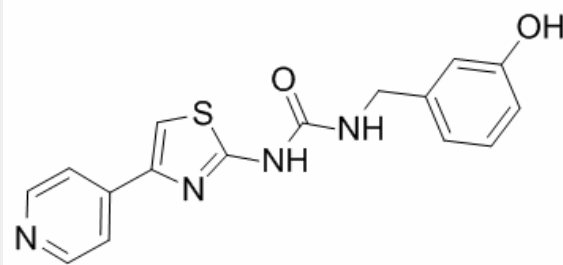
Product Description

RKI-1447 is a potent small molecule inhibitor of **ROCK1** and **ROCK2** with **IC₅₀** values of 14.5 nM and 6.2 nM, respectively.

IC50 & Target: IC50: 14.5 nM (ROCK1), 6.2 nM(ROCK2)^[1]

In Vitro: RKI-1447 is a Type I kinase inhibitor that binds the ATP binding site through interactions with the hinge region and the DFG motif. RKI-1447 suppresses phosphorylation of the ROCK substrates mLC-2 and MYPT-1 in human cancer cells, but has no effect on the phosphorylation levels of the AKT, MEK and S6 kinase at concentrations as high as 10 μ M. RKI-1447 is also highly selective at inhibiting ROCK-mediated cytoskeleton re-organization. RKI-1447 inhibits migration, invasion and anchorage-independent tumor growth of breast cancer cells^[1].

In Vivo: RKI-1447 is highly effective at inhibiting the outgrowth of mammary tumors in a transgenic mouse model. RKI-1447 inhibits mammary tumor growth by 87% and on average the mammary tumors from RKI-1447 treated mice are 7.7 fold smaller compared to those tumors from mice treated with the vehicle control^[1].



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