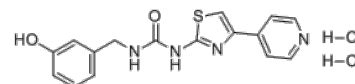


Product Name : RKI 1447 dihydrochloride
Cat. No. : PC-38731
CAS No. : 1782109-09-4
Molecular Formula : C₁₆H₁₆Cl₂N₄O₂S
Molecular Weight : 399.290
Target : ROCK
Solubility : 10 mM in DMSO



Biological Activity

RKI-1447 is a potent small molecule inhibitor of **ROCK1** and **ROCK2** with IC₅₀ of 14.5 nM and 6.2 nM, respectively, suppresses phosphorylation of the ROCK substrates MLC-2 and MYPT-1 in human cancer cells.

RKI-1447 binds the ATP binding site through interactions with the hinge region and the DFG motif.

RKI-1447 shows no effect on the phosphorylation levels of the AKT, MEK, and S6 kinase.

RKI-1447 inhibited migration, invasion and anchorage-independent tumor growth of breast cancer cells (MDA-MB-231 cells, IC₅₀=709 nM).

RKI-1447 is highly effective at inhibiting the outgrowth of mammary tumors in a transgenic mouse model.

References

Patel RA, et al. *Cancer Res.* 2012 Oct 1;72(19):5025-34.

Pireddu R, et al. *Med Chem Commun.* 2012;3(6):699-709.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

E-mail: tech@probechem.com