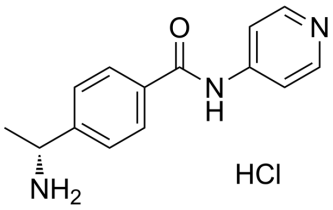
WF-536

Cat. No.:	HY-118837
CAS No.:	539857-64-2
Molecular Formula:	$C_{14}H_{16}ClN_3O$
Molecular Weight:	277.75
Target:	ROCK
Pathway:	Cell Cycle/DNA Damage; Cytoskeleton; Stem Cell/Wnt; TGF-beta/Smad
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

WF-536 is an orally active inhibitor of Rho-associated coiled-coil-containing protein kinase (ROCK). WF-536 has tumor anti-metastatic activity. WF-536 can be used for the research of cancer[1].

In Vitro

WF-536 (1, 3, 10, 30, 100 μM) inhibits both invasion and migration by LLC cells and invasion, migration, and formation of capillarylike tubes on Matrigel by endothelial cells, without cytotoxicity or anti-proliferative action in either cell type[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Migration Assay [1]

Cell Line:	LLC cells, Human umbilical vein endothelial cells
Concentration:	1, 3, 10, 30 μM
Incubation Time:	6 h (tumor cells), 4 h (endothelial cells)
Result:	Significantly inhibited LLC-cell migration, with inhibitory rates of 23% and 44% at 10 and 30 μM, respectively.

Cell Invasion Assay[1]

Cell Line:	LLC cells, Human umbilical vein endothelial cells
Concentration:	1, 3, 10, 30 μM
Incubation Time:	18 h
Result:	Showed significant and concentration-dependent inhibition of LLC-cell invasion.

Cell Proliferation Assay[1]

Cell Line:	LLC cells, Human umbilical vein endothelial cells
Concentration:	1, 30, 100 μM
Incubation Time:	24, 48, 72, and 96 h
Result:	Showed no significant effect at 1-30 μM on the proliferation up to 96 h incubation,

	although the proliferation was decreased at 100 μM over 48 h.

In Vivo

WF-536 (oral; 0.3-3 mg/kg/day; for 28 days) inhibits Lewis lung carcinoma (LLC) metastasis and LLC-induced angiogenesis in mice[1].

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Animal Model:	C57BL/6 mice (male, 6-week old)[1]
Dosage:	0.3, 1, 3 mg/kg
Administration:	Oral; daily; for 28 days
Result:	Significantly reduced the number of pulmonary metastatic colonies of LLC in a dose-dependent manner (0.3- 3 mg/kg).

REFERENCES

[1]. Nakajima, Masahide et al. Wf-536 prevents tumor metastasis by inhibiting both tumor motility and angiogenic actions. European journal of pharmacology vol. 459,2-3 (2003): 113-20.

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