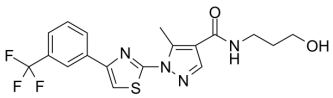
RWJ 50271

Cat. No.:	HY-110086
CAS No.:	162112-37-0
Molecular Formula:	$C_{18}H_{17}F_3N_4O_2S$
Molecular Weight:	410.41
Target:	Integrin
Pathway:	Cytoskeleton

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 250 mg/mL (609.15 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	2.4366 mL	12.1829 mL	24.3659 mL
5 mM	0.4873 mL	2.4366 mL	4.8732 mL
10 mM	0.2437 mL	1.2183 mL	2.4366 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.08 mg/mL (5.07 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (5.07 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

RWJ 50271 is an selective and orally active inhibitor of lymphocyte function-associated antigen-1/intercellular adhesion molecule-1(LFA-1/ICAM-1) interaction with an IC_{50} of 5.0 μM (HL60 cells). RWJ 50271 inhibits LFA-1/ICAM-1-mediated cell adhesion[1].

IC_{50} & Target

IC50: 5.0 μM (LFA-1/ICAM-1, HL60 cells)[1]

In Vitro

RWJ 50271 inhibits adhesion of peripheral blood lymphocytes to plastic immobilized SICAM-1[1].
RWJ 50271 inhibits both human and murine NK activity (IC_{50}=5.0 μM) in an LFA-1/ICAM-1-dependent natural killer [NK] cytotoxicity assay[1].
RWJ 50271 does not inhibit Mac-1/ICAM-1, E-selectidsialyl Lewis X or VLA-4/VCAM-1-mediated cell adhesion up to 20 μM

concentrations[1].
RWJ 50271 does not alter the LFA-1 expression levels on HL60 cells[1].
RWJ 50271 inhibits adhesion of peripheral blood lymphocytes to plastic immobilized SICAM-1[1].
RWJ 50271 does not exhibit any toxic activity up to 100 μM concentrations[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

RWJ 50271 (50 mg/kg; p.o.) is effective in animal model of inflammation[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Mice, the delayed-type hypersensitivity [DTH] reaction model[1]
Dosage:	50 mg/kg
Administration:	Oral administration
Result:	Significantly reduced foot pad swelling (>50%) 48 h after the challenge.

REFERENCES

[1]. Sanfilippo PJ, et al. Novel thiazole based heterocycles as inhibitors of LFA-1/ICAM-1 mediated cell adhesion. J Med Chem. 1995 Mar 31;38(7):1057-9.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA