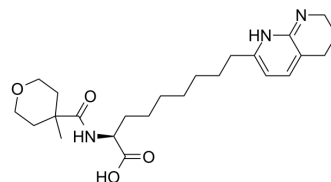


PLN-1474

Cat. No.:	HY-47888		
CAS No.:	2408065-32-5		
Molecular Formula:	C ₂₄ H ₃₇ N ₃ O ₄		
Molecular Weight:	431.57		
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 : ≥ 83.33 mg/mL (193.09 mM)
 * "≥" means soluble, but saturation unknown.

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	2.3171 mL	11.5856 mL	23.1712 mL
5 mM	0.4634 mL	2.3171 mL	4.6342 mL
10 mM	0.2317 mL	1.1586 mL	2.3171 mL

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

BIOLOGICAL ACTIVITY

Description

PLN-1474 (compound 1) is an orally active and selective αvβ1 integrin inhibitor with an IC₅₀ value of <50 nM. PLN-1474 reduces levels of pSMAD3/SMAD3 in liver, hepatic collagen gene expression and hepatic OHP concentration in liver fibrosis mouse model. PLN-1474 can be used for the research of preventing, delaying or researching a fibrotic or cirrhotic disease or disorder.

IC₅₀ & Target

IC₅₀: ≈50 nM (αvβ1), ≈50 nM (αvβ6)^[1]

In Vitro

PLN-1474 inhibits αvβ1 and αvβ6 with IC₅₀s of <50 nM by solid phase assay^[1].
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

PLN-1474 (10 μM) decreases the expression level of profibrotic genes, including COL1A1 and TIMP1 in liver^[1].
 PLN-1474 significantly reduces levels of pSMAD3/SMAD3 in liver, hepatic collagen gene expression and hepatic OHP concentration in a mouse model of liver fibrosis^[1].
 PLN-1474 (6-12 weeks) prophylactically or therapeutically blocks SMAD3 phosphorylation and significantly decreases OHP

levels, collagen gene expression, and collagen deposition examined histologically in the CDAHFD NASH mouse model^[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Anderson Kraig, et al. Combination treatment of liver diseases using integrin inhibitors. WO2021127483. 2021.

Caution: Product has not been fully validated for medical applications. For research use only.

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