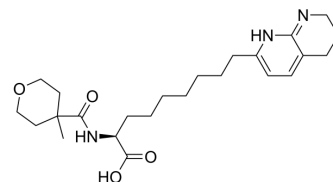


PLN-1474

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.

	Solvent Concentration	Mass	1 mg	5 mg	10 mg
Preparing Stock Solutions	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 IC ₅₀ 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.
IC ₅₀ & Target	IC ₅₀ : 50 nM (αvβ1), 50 nM (αvβ6) ^[1]
In Vitro	PLN-1474 inhibits αvβ1 and αvβ6 with IC ₅₀ s 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.

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