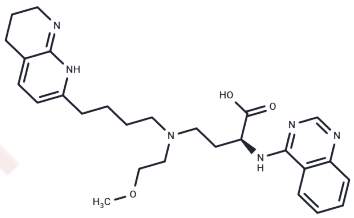
Data Sheet (Cat.No.T39933)

TargetMol

Bexotegrast

Chemical Properties



CAS No. : 2376257-44-0

Formula: C27H36N6O3

Molecular Weight: 492.61

Storage: Keep away from direct sunlight,Keep away from moisture
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Bexotegrast (PLN-74809) is an orally active and potent inhibitor of αvβ6 and αvβ1 integrins with antifibrotic effects, inhibiting αvβ6 and αvβ1-induced activation of TGF-β. It is applicable for studies of idiopathic pulmonary fibrosis (IPF) and non-specific interstitial pneumonia (NSIP).
Targets(IC50)	Integrin
In vitro	Bexotegrast (PLN-74809; 1.82 μM; incubation for 7 days) inhibits lung collagen deposition and Smad3 phosphorylation in a dose-dependent manner[2].
In vivo	Bexotegrast (PLN-74809; 100-500 mg/kg), administered orally to mice 7 to 21 days after bleomycin-induced lung injury, dose-dependently reduces interstitial fibrotic collagen deposition caused by bleomycin and blocks Smad3 phosphorylation [2].

Solubility Information

Solubility	DMSO: 100 mg/mL (203 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 4 mg/mL (8.12 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.030 mL	10.150 mL	20.300 mL
5 mM	0.406 mL	2.030 mL	4.060 mL
10 mM	0.203 mL	1.015 mL	2.030 mL
50 mM	0.0406 mL	0.203 mL	0.406 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Anindya Roy, et al. De novo design of highly selective miniprotein inhibitors of integrins αvβ6 and αvβ8. Nat Commun. 2023 Sep 13;14(1):5660.

Martin L Decaris, et al. Dual inhibition of αvβ6 and αvβ1 reduces fibrogenesis in lung tissue explants from patients with IPF. Respir Res. 2021 Oct 19;22(1):265.