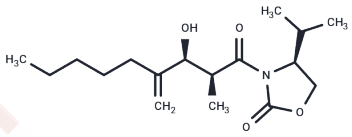
Data Sheet (Cat.No.T15769)

TargetMol

LMT-28

Chemical Properties



CAS No. : 1239600-18-0

Formula: C17H29NO4

Molecular Weight: 311.42

Storage: Pure form: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	LMT-28 is an inhibitor of IL-6 and selectively inhibits IL-6-induced phosphorylation of gp130, STAT3, and JAK2.
Targets(IC50)	IL Receptor,Interleukin
In vitro	LMT-28 (1-10000 nM) inhibits IL-6-induced cell proliferation(IC50 = 7.5 μM)[1].
In vivo	In male DBA/1J collagen-induced arthritis mice, LMT-28 (0-0.5 mg/kg) reduces the serum levels of cartilage oligomeric matrix protein, serum amyloid P and anti-CII IgG by 50%, 55%, and 62%[1].

Solubility Information

Solubility	DMSO: 145 mg/mL (465.61 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: 2 mg/mL (6.42 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	3.2111 mL	16.0555 mL	32.111 mL
5 mM	0.6422 mL	3.2111 mL	6.4222 mL
10 mM	0.3211 mL	1.6055 mL	3.2111 mL
50 mM	0.0642 mL	0.3211 mL	0.6422 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

Hong SS, et al. A Novel Small-Molecule Inhibitor Targeting the IL-6 Receptor β Subunit, Glycoprotein 130. J Immunol. 2015 Jul 1;195(1):237-45.

Liu Q, Li J, Zong Q, et al.Interferon-induced polarization of M1 macrophages mediates antiviral activity against the hepatitis B virus via the hepcidin-ferroportin axis.International Immunopharmacology.2024, 134: 112219.