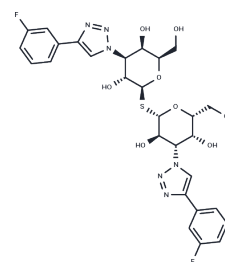


TD139

Chemical Properties

CAS No. : 1450824-22-2
 Formula: C₂₈H₃₀F₂N₆O₈S
 Molecular Weight: 648.64
 Storage: 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	TD139 is a small molecule inhibitor of inhaled galectin-3 (Gal-3) with potential anti-fibrotic activity, commonly used in the study of idiopathic pulmonary fibrosis.
Targets(IC50)	Galectin
In vitro	TD139 has a high affinity for galectin-3 with a K _d of 14 nM and 10 nM for galectin-1, but low affinity for galectins 2, 4N, 4C, 7, 8N, or 9N [1].
In vivo	In primary lung AECs, TD139 reduces TGF-β1-induced β-catenin translocation to the nucleus, keeping most β-catenin at the cell surface, and blocks TGF-β1-induced β-catenin phosphorylation. TD139 treatment in WT mice results in a marked reduction in lung fibrosis and β-catenin activation, along with decreased galectin-3 expression [1]. Pretreatment of WT C57BL/6 mice with TD139 attenuates liver injury, reduces infiltration of IFNγ-, IL-17-, and IL-4-producing CD4(+) T cells, increases IL-10-producing CD4(+) T cells and F4/80(+) CD206(+) alternatively activated macrophages, and prevents apoptosis of liver-infiltrating MNCs [2].

Solubility Information

Solubility	H ₂ O: Insoluble, Ethanol: 3 mg/mL (4.63 mM),Sonication is recommended. DMSO: 55 mg/mL (84.79 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 (3.08 mM),Sonication is recommended. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.5417 mL	7.7084 mL	15.4169 mL
5 mM	0.3083 mL	1.5417 mL	3.0834 mL
10 mM	0.1542 mL	0.7708 mL	1.5417 mL
50 mM	0.0308 mL	0.1542 mL	0.3083 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

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