

GB1107

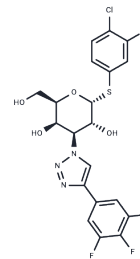
Chemical Properties

CAS No. : 1978336-61-6

Formula: C₂₀H₁₆Cl₂F₃N₃O₄S

Molecular Weight: 522.32

Storage: Store at low temperature, Keep away from direct sunlight
 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	GB1107 is an effective and selective Galectin-3 inhibitor with a K _d of 37 nM.
Targets(IC ₅₀)	Galectin
In vitro	GB1107 (0-1 μM) increases CD8+ T cell infiltration and tumor M1 macrophage polarization. GB1107 potentiates the effects of a PD-L1 immune checkpoint inhibitor to increase the expression of cytotoxic and apoptotic effector molecules including perforin-1, Fas ligand, IFN-γ, granzyme B, and cleaved caspase-3[1].
In vivo	In CD-1 nude female mice received 3x10 ⁶ human lung adenocarcinoma cells (A549), GB1107 (10 mg/kg, p.o.) significantly reduces tumor growth and final tumor weights[1].

Solubility Information

Solubility	DMSO: 150 mg/mL (287.18 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 (3.83 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	1.9145 mL	9.5727 mL	19.1454 mL
5 mM	0.3829 mL	1.9145 mL	3.8291 mL
10 mM	0.1915 mL	0.9573 mL	1.9145 mL
50 mM	0.0383 mL	0.1915 mL	0.3829 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

Vuong L, et al. An orally active galectin-3 antagonist inhibits lung adenocarcinoma growth and augments response to PD-L1 blockade. *Cancer Res.* 2019 Jan 23. pii: canres.2244.2018.

Wang Q, Wu Y, Jiang G, et al. Galectin-3 induces pathogenic immunosuppressive macrophages through interaction with TREM2 in lung cancer. *Journal of Experimental & Clinical Cancer Research.* 2024, 43(1): 224.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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