

TLR9-IN-1

Chemical Properties

CAS No. : 2226366-86-3

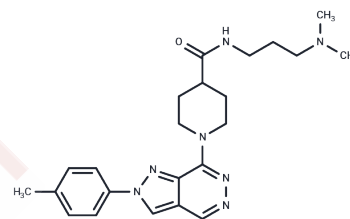
Formula: C₂₃H₃₁N₇O

Molecular Weight: 421.54

Keep away from direct sunlight

Storage: 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 | TLR9-IN-1 (compound 29) is an effective and selective TLR9 inhibitor with an IC ₅₀ of 7 nM in human B cells, suitable for autoimmune diseases and inflammation. |
| Targets(IC ₅₀) | TLR |
| In vitro | TLR9-IN-1 (0-10 μM, 24 hours) treated human monocytes showed moderate inhibitory activity against IL-1β in cells, with an IC ₅₀ of 1.61 μM in human monocytes (co-incubated with TLR8 agonist ORN8L and RNA oligonucleotides). [1] |

Solubility Information

| | |
|---------------------|---|
| Solubility | DMSO: 420 mg/mL (996.35 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: 10 mg/mL (23.72 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 | 2.3723 mL | 11.8613 mL | 23.7225 mL |
| 5 mM | 0.4745 mL | 2.3723 mL | 4.7445 mL |
| 10 mM | 0.2372 mL | 1.1861 mL | 2.3723 mL |
| 50 mM | 0.0474 mL | 0.2372 mL | 0.4745 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

Albert Frederick Candia, et al. Toll-like receptor antagonist compounds and methods of use. WO2018089695

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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