

GLPG2534

Chemical Properties

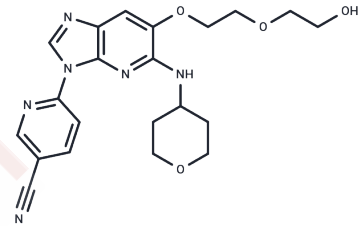
CAS No. : 2095615-97-5

Formula: C₂₁H₂₄N₆O₄

Molecular Weight: 424.45

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 | GLPG2534 is an orally active, selective and potent IRAK4 inhibitor with anti-inflammatory activity. GLPG2534 inhibits human and mouse IRAK4 and could be used to study psoriasis and atopic dermatitis. |
| Targets(IC50) | IRAK |
| In vitro | GLPG2534 inhibits IL-6 release driven by IL-1 β with an IC ₅₀ of 55 nM[1]. It also inhibits TNF- α -driven IL-6 release, with an IC ₅₀ of 6.6 μ M[1]. When applied at concentrations ranging from 0.1 to 10 μ M for 16 hours, GLPG2534 inhibits the expression of S100A7, DEFB4A, CXCL8, and TNF in ciliated epithelial cells stimulated with ciliogenesis-promoting factors[1]. |
| In vivo | GLPG2534, administered orally at doses ranging from 0.3 to 10 mg/kg, inhibits CL097-driven TNF- α release in mouse blood[1]. Furthermore, oral administration of GLPG2534 at doses of 10 and 30 mg/kg, twice daily, alleviates inflammation in a psoriasis-like mouse model[1]. Additionally, GLPG2534, at doses of 3-30 mg/kg, orally administered twice daily for 5 days, mitigates the development of IL-33 and MC903-induced atopic dermatitis-like skin inflammation in mice[1]. |

Solubility Information

| | |
|------------|--|
| Solubility | DMSO: 80 mg/mL (188.48 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble) |
|------------|--|

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|-------|------------|------------|-------------|
| 1 mM | 2.356 mL | 11.780 mL | 23.5599 mL |
| 5 mM | 0.4712 mL | 2.356 mL | 4.712 mL |
| 10 mM | 0.2356 mL | 1.178 mL | 2.356 mL |
| 50 mM | 0.0471 mL | 0.2356 mL | 0.4712 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

Lavazais S, et al. IRAK4 inhibition dampens pathogenic processes driving inflammatory skin diseases. *Sci Transl Med.* 2023 Feb 15;15(683):eabj3289.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481