GLPG3312

Cat. No.: HY-157442

CAS No.: 2340388-72-7

Molecular Formula: $C_{23}H_{21}F_2N_5O_3$

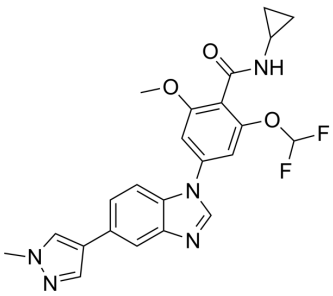
Molecular Weight: 453.44

Target: Salt-inducible Kinase (SIK)

Pathway: Immunology/Inflammation

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (220.54 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	2.2054 mL	11.0268 mL	22.0536 mL
	5 mM	0.4411 mL	2.2054 mL	4.4107 mL
	10 mM	0.2205 mL	1.1027 mL	2.2054 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: 2.5 mg/mL (5.51 mM); Clear solution; Need ultrasonic
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: 2.5 mg/mL (5.51 mM); Clear solution; Need ultrasonic
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: 2.5 mg/mL (5.51 mM); Clear solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

GLPG3312 (Compound 28) is a selective pan-SIK inhibitor with IC_{50} values of 2.0 nM, 0.7 nM and 0.6 nM for SIK1, SIK2 and SIK3, respectively. GLPG3312 exhibits anti-inflammatory and immunomodulatory activity in vitro on human primary myeloid cells and in vivo in mouse models. GLPG3312 has good oral bioavailability and can be used for research on inflammatory and immune diseases[1].

IC_{50} & Target	SIK1	SIK2	SIK3
	2.0 nM (IC_{50})	0.7 nM (IC_{50})	0.6 nM (IC_{50})

REFERENCES

[1]. Temal-Laib T, et al. Optimization of Selectivity and Pharmacokinetic Properties of Salt-Inducible Kinase Inhibitors that Led to the Discovery of Pan-SIK Inhibitor GLPG3312. J Med Chem. 2024 Jan 11;67(1):380-401.

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