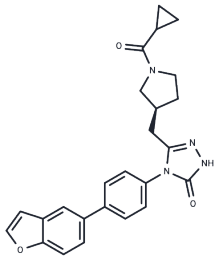
Data Sheet (Cat.No.T15429)

GSK2194069

Chemical Properties



CAS No. : 1332331-08-4

Formula: C25H24N4O3

Molecular Weight: 428.48

Storage: Store at low temperature
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	GSK2194069 is an active β-keto reductase (KR)-specific inhibitor of fatty acid synthase (FASN) with an IC50 of 7.7 nM in an assay for the detection of released CoA.GSK2194069 inhibits the proliferation of FAS in cancer cells through the action of acetoacetyl-coenzyme A and NADPH.
Targets(IC50)	Fatty Acid Synthase,NADPH
In vitro	GSK2194069 (100 nM; 24 h) suppresses fatty acid synthase (FAS) activity in cancer cell lines (KATO-III, MKN45, A549, SNU-1) while maintaining FAS protein production levels.[1] GSK2194069 (5 μM and 20 μM) demonstrates higher efficacy in FASN-positive LNCaP cells compared to FASN-negative PC3 cells, correlating with higher FASN expression in LNCaP cells.[2] GSK2194069 (50 μM; 24 h) inhibits the growth of LNCaP-LN3 human prostate cancer cells.[3] GSK2194069 (60.4 nM; 24 h) exhibits metabolomic alterations, including decreases in L-acetyl carnitine, stearoyl carnitine, vaccenyl carnitine, and palmitoyl-L-carnitine in LNCaP-LN3 cells.[3]

Solubility Information

Solubility	DMSO: 90 mg/mL (210.04 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: 3.3 mg/mL (7.7 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3338 mL	11.6692 mL	23.3383 mL
5 mM	0.4668 mL	2.3338 mL	4.6677 mL
10 mM	0.2334 mL	1.1669 mL	2.3338 mL
50 mM	0.0467 mL	0.2334 mL	0.4668 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

Hardwicke MA, et al. A human fatty acid synthase inhibitor binds β-ketoacyl reductase in the keto-substrate site. Nat Chem Biol. 2014;10(9):774-779.
Kelly JM, et al. Synthesis and Evaluation of 11C-Labeled Triazolones as Probes for Imaging Fatty Acid Synthase Expression by Positron Emission Tomography. Molecules. 2022;27(5):1552.
Oh JE, et al. Deciphering Fatty Acid Synthase Inhibition-Triggered Metabolic Flexibility in Prostate Cancer Cells through Untargeted Metabolomics. Cells. 2020;9(11):2447.