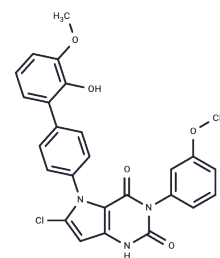


GSK621

Chemical Properties

CAS No. : 1346607-05-3
 Formula: C₂₆H₂₀ClN₃O₅
 Molecular Weight: 489.91
 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	GSK621 is a specific and potent AMPK activator.
Targets(IC50)	Apoptosis,AMPK,Autophagy
In vitro	In AML cell lines and primary AML samples, GSK621 markedly increases phosphorylation at AMPK α T172, a marker of AMPK activation. In a set of 20 cell lines, GSK621 reduces the proliferation of all 20 lines with IC50 ranged from 13-30 μ M, and increases apoptosis in 17 (85%) lines. In addition, GSK621 also triggers autophagy, which partially contributes to AML cell death. [1]
In vivo	In nude mice bearing MOLM-14 xenografts, GSK621 (30 mg/kg, i.p.) reduces leukemia growth and significantly extends survival by enhancing AMPK activity and the induction of apoptosis. [1]
Kinase Assay	AMPK enzymatic assay: HEPG2 cells are treated with increasing doses of A-769662 or GSK621, and ACC S79 phosphorylation is assessed as a surrogate marker for AMPK activation using a commercially available ELISA kit.
Cell Research	Twenty AML cell lines are treated with log ₁₀ dilutions of GSK621 and relative viability is determined by CellTiter-Glo [®] assay. IC50 of GSK621 among these 20 cell lines is calculated using the Prism software and are presented as log[C] with [C] in mol/l (M). Results are presented for 5 different cell lines per panel.(Only for Reference)

Solubility Information

Solubility	DMSO: 83.33 mg/mL (170.09 mM),Sonication is recommended. Ethanol: < 1 mg/mL (insoluble or slightly soluble), H ₂ O: < 1 mg/mL (insoluble or slightly soluble), (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 1 mg/mL (2.04 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	2.0412 mL	10.206 mL	20.4119 mL
5 mM	0.4082 mL	2.0412 mL	4.0824 mL
10 mM	0.2041 mL	1.0206 mL	2.0412 mL
50 mM	0.0408 mL	0.2041 mL	0.4082 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

Sujobert P, et al. Cell Rep. 2015, 11(9), 1446-1457.

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