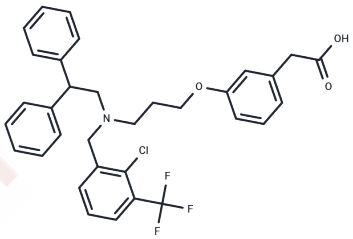
Data Sheet (Cat.No.T6310L)

TargetMol

GW3965

Chemical Properties



CAS No. : 405911-09-3

Formula: C33H31ClF3NO3

Molecular Weight: 582.05

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	GW3965 is a potent and selective agonist of liver X receptor (LXR) with EC50 values of 190 nM for hLXRα and 30 nM for hLXRβ [1] [2] [3].
Targets(IC50)	Others,Liver X Receptor
In vitro	GW3965 effectively induces death in GBM cells in vitro, particularly in those expressing EGFRvIII. It enhances the expression of the cholesterol transporter gene ABCA1 and the E3 ubiquitin ligase IDOL, while decreasing LDLR levels. Furthermore, LXR ligands, including GW3965, can suppress both platelet aggregation and calcium mobilization induced by collagen or CRP. Although at lower concentrations (1 or 5 μM), GW3965 slightly inhibits fibrinogen binding and P-selectin exposure in platelets activated by 1 μg/mL CRP, higher doses of GW3965 (10 μM) or T0901317 (40 μM) significantly diminish fibrinogen and P-selectin levels on the platelet surface.
In vivo	GW3965 elevates neuroactive steroids in the spinal cord, cerebellum, and cerebral cortex of STZ-rats, not affecting the CNS in non-pathological subjects. It also enhances dihydroprogesterone levels and myelin basic protein expression in the spinal cord of diabetic rats [1]. At a dose of 40 mg/kg orally, GW3965 significantly upregulates ABCA1 expression and downregulates LDLR expression, which correlates with a 59% reduction in tumor growth and a substantial increase in GBM cell apoptosis by 25 times in vivo [2]. Additionally, administered intravenously at 2 mg/kg, GW3965 prolongs bleeding time and modulates platelet thrombus formation in vivo [3].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.7181 mL	8.5903 mL	17.1807 mL
5 mM	0.3436 mL	1.7181 mL	3.4361 mL
10 mM	0.1718 mL	0.859 mL	1.7181 mL
50 mM	0.0344 mL	0.1718 mL	0.3436 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

Yan C, Zheng L, Jiang S, et al.Exhaustion-associated cholesterol deficiency dampens the cytotoxic arm of antitumor immunity.Cancer Cell.2023

Sha X, Lin J, Wu K, et al.The TRPV1-PKM2-SREBP1 axis maintains microglial lipid homeostasis in Alzheimer's disease.Cell Death & Disease.2025, 16(1): 14.

The TRPV1-PKM2-SREBP1 axis maintains microglial lipid homeostasis in Alzheimer's disease[J]. Cell Death & Disease, 2025, 16(1): 14.

Inhibition of ASGR1 decreases lipid levels by promoting cholesterol excretion

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