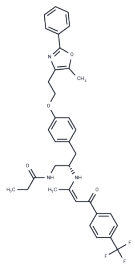
Data Sheet (Cat.No.T8486)

GW6471

Chemical Properties



CAS No. : 880635-03-0

Formula: C35H36F3N3O4

Molecular Weight: 619.67

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	GW6471 is an antagonist of PPARα with IC50 of 0.24 μ M. GW6471 enhances the binding affinity of the PPAR α ligand-binding domain to the co-repressor proteins SMRT and NCoR.
Targets(IC50)	PPAR
In vitro	**METHODS**: RCC cells Caki-1 (VHL wild type) and 786-O (VHL mutant) were treated with GW6471 (12.5-100 μM) for 72 h. Cell viability was measured using MTT assay.
In vivo	**METHODS**: To assay in vivo antitumor activity, GW6471 (20 mg/kg) was injected intraperitoneally every two days for four weeks into Nu/Nu mice bearing the RCC tumor Caki-1. **RESULTS**: In vivo treatment of xenograft mouse model with PPARα antagonist GW6471 attenuated RCC growth. [2]

Solubility Information

Solubility	DMSO: 16.67 mg/mL (26.9 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 0.25 mg/mL (0.4 mM),Solution. *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	1.6138 mL	8.0688 mL	16.1376 mL
5 mM	0.3228 mL	1.6138 mL	3.2275 mL
10 mM	0.1614 mL	0.8069 mL	1.6138 mL
50 mM	0.0323 mL	0.1614 mL	0.3228 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

Abu Aboud O, et al. Inhibition of PPARα induces cell cycle arrest and apoptosis, and synergizes with glycolysis inhibition in kidney cancer cells. PLoS One. 2013 Aug 7;8(8):e71115.

Wang R, Zhao J, Jin J, et al. WY-14643 attenuates lipid deposition via activation of the PPARα/CPT1A axis by targeting Gly335 to inhibit cell proliferation and migration in ccRCC. Lipids in Health and Disease. 2022, 21(1): 1-18.

Abu Aboud O, et al. PPARα inhibition modulates multiple reprogrammed metabolic pathways in kidney cancer and attenuates tumor growth. Am J Physiol Cell Physiol. 2015 Jun 1;308(11):C890-8.

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