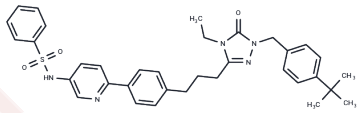
Data Sheet (Cat.No.T12278)

TargetMol

NXT629

Chemical Properties



CAS No. : 1454925-59-7

Formula: C35H39N5O3S

Molecular Weight: 609.78

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	NXT629 is a selective and highly efficient PPAR-α antagonist with anticancer activity. It inhibits PPARδ, PPARγ, Erβ, GR, and TRβ and can be used in research on ovarian cancer and melanoma.
Targets(IC50)	Estrogen/progestogen Receptor,PPAR,Thyroid hormone receptor(THR)
In vitro	NXT629 (compound 33) is a potent and selective PPAR-α antagonist with an IC50 of 77 nM for human PPARα, as well as weaker effects on other nuclear hormone receptors (e.g., PPARδ, PPARγ, Erβ, GR, and TRβ) with IC50s of 6.0 μM, 15 μM, 15.2 μM, 32.5 μM, and >100 μM, respectively.[1] The competitive inhibitory ability of NXT629 on PPARα, PPARβ/δ and PPARγ was also validated, with corresponding IC50s of 2.3 μM, 35.1 μM and 6.9 μM, respectively.[2]
In vivo	NXT629 exhibits low oral bioavailability in mice and rats. NXT629 administered intraperitoneally (30 mg/kg once daily for 6 weeks) significantly slowed down the growth of subcutaneous SKOV-3 tumors in nude mice and showed inhibition of subcutaneous B16F10 tumor growth in C57Bl/6 mice. In addition, NXT629 (30 mg/kg, intraperitoneal injection) showed weak anti-angiogenic activity in FGF-induced angiogenesis. NXT629 (3 and 30 mg/kg, intraperitoneal injection) also reduced experimental metastasis of B16F10 melanoma cells in the lungs of mice. [2]

Solubility Information

Solubility	DMSO: 100 mg/mL (163.99 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: 4 mg/mL (6.56 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	1.6399 mL	8.1997 mL	16.3994 mL
5 mM	0.328 mL	1.6399 mL	3.2799 mL
10 mM	0.164 mL	0.820 mL	1.6399 mL
50 mM	0.0328 mL	0.164 mL	0.328 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

Bravo Y, et al. Identification of the first potent, selective and bioavailable PPARα antagonist. Bioorg Med Chem Lett. 2014 May 15;24(10):2267-72.

Stebbins KJ, et al. In vitro and in vivo pharmacology of NXT629, a novel and selective PPARα antagonist. Eur J Pharmacol. 2017 Aug 15;809:130-140.