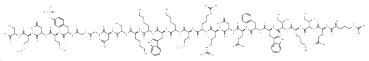
Data Sheet (Cat.No.TQ0003)

TargetMol

740 Y-P

Chemical Properties



CAS No. : 1236188-16-1

Formula: C141H222N43O39PS3

Molecular Weight: 3270.7

Storage: Store at low temperature,Store under nitrogen,Keep away from direct sunlight,Keep away from moisture
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	740 Y-P (740YPDGFR) is a PI3K activator with cell permeability. 740 Y-P binds GST fusion proteins containing the N-and C-terminal SH2 domains of p85.
Targets(IC50)	Autophagy,PI3K
In vitro	**METHODS**: C2 muscle cells were treated with 740 Y-P (50 μg/mL) for 48 hours, and the cell cycle was observed and analyzed using an ultraviolet fluorescence microscope. **RESULTS**: Mitosis in the 740 Y-P-specific stimulation medium was superior to EGF or FGF in stimulating the entry into the S phase. It showed that the percentage of S phase cells in C2 cells was 48.3%. [1] **METHODS**: PC12 cells were treated with 740 YP (30 μM) for 24 hours, and the LC3-II/LC3-I levels were detected by western blot. **RESULTS**: 740 YP significantly inhibited the LC3-II/LC3-I levels in PC12 cells induced by GO. [2]
In vivo	**METHODS**: To study the neuroprotective effect of 740 Y-P, 740 Y-P (10 mg/kg) was intraperitoneally injected into the rat model of Alzheimer's disease (AD) for 6 weeks. **RESULTS**: 740 Y-P can reduce the ROS (reactive oxygen species) level in hippocampal tissue after treatment with Aβ(25-32), and increase the phosphorylation degree of AKT and PI3K. This indicates that 740 Y-P has a certain neuroprotective effect in vivo, which may be achieved by activating the PI3K/Akt signaling pathway. [3] **METHODS**: To study the role of 740 Y-P in cardiac hypertrophy, 740 Y-P (10 mg/kg) was intraperitoneally injected into mice for 6 weeks. **RESULTS**: 740 Y-P can significantly increase the ratio of heart weight to body weight (HW/BW) and the ratio of heart weight to tibial length (HW/TL), and increase the cross-sectional area of cardiomyocytes. Furthermore, 740 Y-P can also increase the expression of hypertrophy related genes such as ANP, BNP and β-MHC in cardiomyocytes, indicating that it can promote cardiac hypertrophy in vivo. [4] **METHODS**: To study the analgesic effect of 740 Y-P, 740 Y-P (1, 5, 10, 20 μg/5 μL) was intrathecally injected into a mouse model of chronic constriction injury of the sciatic nerve (CCI). **RESULTS**: At doses of 10 and 20 μg/5 μL, 740 Y-P can significantly alleviate tactile and thermal hypersensitivity caused by CCI. 740 Y-P showed significant analgesic effects within 1.5, 3 and 5 hours after injection, but the effect was no longer significant after 24

In vivo	hours. [5]

Solubility Information

Solubility	DMSO: 50 mg/mL (15.29 mM),Sonication is recommended. H2O: 5.5 mg/mL (1.68 mM),when pH is adjusted with HCl. Sonication is recommmended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (0.61 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	0.3057 mL	1.5287 mL	3.0574 mL
5 mM	0.0611 mL	0.3057 mL	0.6115 mL
10 mM	0.0306 mL	0.1529 mL	0.3057 mL
50 mM	0.0061 mL	0.0306 mL	0.0611 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

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Veratramine influences the proliferation of human osteosarcoma cells through modulation of the PI3K/AKT signaling cascade