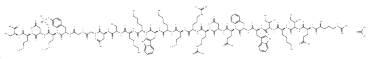
Data Sheet (Cat.No.TQ0003L1)

TargetMol

740 Y-P acetate

Chemical Properties



CAS No. :

Formula: C143H226N43O41PS3

Molecular Weight: 3330.79

Storage: Keep away from direct sunlight,Keep away from moisture,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	740 Y-P acetate (740YPDGFR acetate) is a potent and cell-permeable PI3K activator.740 Y-P acetate tends to bind to GST fusion proteins containing the N- and C-terminal SH2 structural domains of p85, but not to GST alone.
Targets(IC50)	PI3K
In vitro	740 Y-P TFA (1 μg/mL) stimulates Mitosis at the lowest concentration tested. The peptide stimulates Mitosis in the presence and absence of serum (0.5%). In the former instance, The maximum reaction was observed at 50 μg/mL. 740Y-P stimulation of Mitosis is highly specific, rather than the general characteristics of cell-permeable SH2 domain binding peptides. [1] 740 Y-P TFA (50 μg/ml; 48 h) in the culture medium, the specific stimulation of Mitosis was superior to EGF or FGF in stimulating the entry of S phase, which showed that the percentage of S phase cells in C2 cells was 48.3%. In addition, LY294002 or wortmannin effectively inhibited the Mitosis response stimulated by the 740Y-P TFA peptide. [1] 740 Y-P TFA (30 μM; 24 h) significantly inhibited the levels of LC3-II/LC3-I in GO induced PC12 cells. [2]

Solubility Information

Solubility	H2O: 83.3 mg/mL (25.01 mM),Sonication is recommended. DMSO: 83.3 mg/mL (25.01 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.3002 mL	1.5011 mL	3.0023 mL
5 mM	0.060 mL	0.3002 mL	0.6005 mL
10 mM	0.030 mL	0.1501 mL	0.3002 mL
50 mM	0.006 mL	0.030 mL	0.060 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

Derossi D, et al. Stimulation of mitogenesis by a cell-permeable PI 3-kinase binding peptide. Biochem Biophys Res Commun. 1998;251(1):148-152.

Feng X, et al. Graphene oxide induces p62/SQSTM-dependent apoptosis through the impairment of autophagic flux and lysosomal dysfunction in PC12 cells. Acta Biomater. 2018;81:278-29