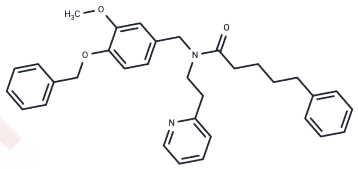
Data Sheet (Cat.No.T24437)

TargetMol

MCP110

Chemical Properties



CAS No. : 521310-51-0

Formula: C33H36N2O3

Molecular Weight: 508.65

Storage: Pure form: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	MCP110 is an inhibitor of the interaction of Ras with Raf-1 and can be used in studies about the treatment of human tumors.
Targets(IC50)	Raf,Ras
In vitro	In A549 cells, MCP110 (20 μM) decreases Ras stimulation of Raf-1 and cyclin D level stimulated by the treatment with EGF (100 ng/mL), platelet-derived growth factor (20 ng/mL), and serum. In in HEK293 cells, MCP110 (10 and 20 μM) inhibits H-Ras (V12)-induced AP-1 activation. In fibrosarcoma HT1080 cells, MCP110 (1, 2, 5, 10, and 20 μM) shows a dose-dependent inhibition of elevated Raf-1 activity[1].

Solubility Information

Solubility	DMSO: 245 mg/mL (481.67 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: 5 mg/mL (9.83 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	1.966 mL	9.8299 mL	19.6599 mL
5 mM	0.3932 mL	1.966 mL	3.932 mL
10 mM	0.1966 mL	0.983 mL	1.966 mL
50 mM	0.0393 mL	0.1966 mL	0.3932 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

Khazak V, et al. A two-hybrid approach to identify inhibitors of the RAS-RAF interaction. Enzymes. 2013;33 Pt A: 213-48.

González-Pérez V, et al. Genetic and functional characterization of putative Ras/Raf interaction inhibitors in C. elegans and mammalian cells. J Mol Signal. 2010 Feb 23;5:2.

Skobeleva N, et al. In vitro and in vivo synergy of MCP compounds with mitogen-activated protein kinase pathway- and microtubule-targeting inhibitors. Mol Cancer Ther. 2007 Mar;6(3):898-906.

Juran Kato-Stankiewicz,et al. Inhibitors of Ras/Raf-1 Interaction Identified by Two-Hybrid Screening Revert Ras-dependent Transformation Phenotypes in Human Cancer Cells. Proc Natl Acad Sci U S A. 2002 Oct 29;99(22): 14398-403.