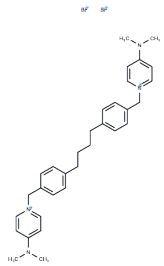
Data Sheet (Cat.No.T12085)

MN58b

Chemical Properties



CAS No. : 203192-01-2

Formula: C32H40Br2N4

Molecular Weight: 640.49

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	MN58b is a selective inhibitor of choline kinase α (CHKα).
Targets(IC50)	Apoptosis,AChR
In vitro	MN58b (1-5 μM; 72 hours; SK-PC-1, Suit2 008, IMIM-PC2, and RWP-1 cells) has a marked effect on colony formation at 1 μM, and growth is completely abolished at 5 μM in all the cell lines[1]
In vivo	MN58b treatment significantly decreases phosphomonoesters in both HT29 and MDA-MB-231 xenografts. Phosphocholine levels are found to correlate with choline kinase activities[2].

Solubility Information

Solubility	DMSO: 6.41 mg/mL (10.01 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: 1 mg/mL (1.56 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	1.5613 mL	7.8065 mL	15.613 mL
5 mM	0.3123 mL	1.5613 mL	3.1226 mL
10 mM	0.1561 mL	0.7807 mL	1.5613 mL
50 mM	0.0312 mL	0.1561 mL	0.3123 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

Mazarico JM, et al. Choline Kinase Alpha (CHKα) as a Therapeutic Target in Pancreatic Ductal Adenocarcinoma: Expression, Predictive Value, and Sensitivity to Inhibitors. Mol Cancer Ther. 2016 Feb;15(2):323-33.
Al-Saffar NM, et al. Noninvasive magnetic resonance spectroscopic pharmacodynamic markers of the choline kinase inhibitor MN58b in human carcinoma models. Cancer Res. 2006 Jan 1;66(1):427-34.