Data Sheet (Cat.No.T6823)

E3330

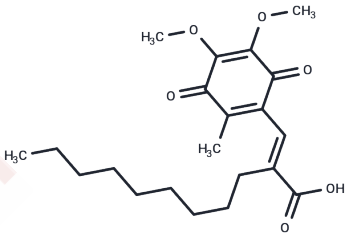
Chemical Properties

CAS No. : 136164-66-4

Formula: C21H30O6

Molecular Weight: 378.46

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	E3330 is a potent and selective APE1(Ref-1) inhibitor, which suppressed NF-kappa B DNA-binding activity.
Targets(IC50)	NF-κB,Reactive Oxygen Species,HIF/HIF Prolyl-Hydroxylase,DNA/RNA Synthesis,ROS, VEGFR
In vitro	E3330 affects hemangioblast development in vitro via inhibition of Ape1 redox activity. [1] E3330 inhibits the growth of human pancreatic cancer cell line PANC1, XPA1, MIAPACA, BxPC3, and PK9. E3330 also promotes exit of cell cycle in PANC1 cells, inhibits the DNA-Binding activity of HIF-1α and migration of pancreatic cancer cells. [2] In JHH6 cells, E3330 prevents the functional activation of NF-κB via the alteration of APE1 subcellular trafficking and reduces IL-6 and IL-8 expression induced by TNF-α and FAs accumulation through blockage of the redox-mediated activation of NF-κB. [3]
In vivo	In mice with endotoxin-mediated hepatitis, E3330 (300 mg/kg, p.o.) attenuates the elevation of plasma tumor necrosis factor activity and protectes mice from liver injury. [4] In Rat model, E3330 (100 mg/kg, p.o.) also protectes rats from severe liver injury induced with endotoxin plus galactosamine. [5]
Cell Research	PANC1 cells are placed in one well of a 12-well plate and treated with 5 to 30 μM E3330. After a 24, 48, and 72 h of culture, the cells are washed with PBS and stained with trypan blue, and cell viability is examined by counting the live cell numbers.(Only for Reference)

Solubility Information

Solubility	DMSO: 50 mg/mL (132.11 mM),Sonication is recommended. H2O: < 1 mg/mL (insoluble or slightly soluble), Ethanol: 70 mg/mL (184.96 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: 2 mg/mL (5.28 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	2.6423 mL	13.2114 mL	26.4229 mL
5 mM	0.5285 mL	2.6423 mL	5.2846 mL
10 mM	0.2642 mL	1.3211 mL	2.6423 mL
50 mM	0.0528 mL	0.2642 mL	0.5285 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

Zou GM, et al. Blood. 2007, 109(5), 1917-1922.
Zou GM, et al. Mol Cancer Ther. 2008, 7(7), 22012-2021.
Cesaratto L, et al. PLoS One. 2013, 8(8), e70909.
Nagakawa J, et al. J Pharmacol Exp Ther. 1992, 262(1), 145-150.
Nagakawa J, et al. J Pharmacol Exp Ther. 1993, 264(1), 496-500.
Guerreiro PS, et al. The APE1 redox inhibitor E3330 reduces collective cell migration of human breast cancer cells and decreases chemoinvasion and colony formation when combined with docetaxel. Chem Biol Drug Des. 2017 Oct;90(4):561-571.