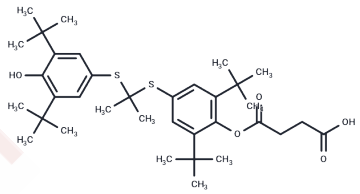
Data Sheet (Cat.No.T4287)

TargetMol

Succinobucol

Chemical Properties



CAS No. : 216167-82-7

Formula: C35H52O5S2

Molecular Weight: 616.91

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	Succinobucol (Probucol monosuccinate) is a novel phenolic antioxidant small molecule with anti-oxidant and anti-inflammatory properties. It designed to treat atherosclerosis of the blood vessels of the heart or coronary artery disease.
Targets(IC50)	Antioxidant,Reactive Oxygen Species,ROS
In vitro	In rabbit whole blood, Succinobucol (10, 50, 100 μM) causes a dose-dependent reduction in collagen-induced platelet aggregation. Succinobucol (10, 100 μM) significantly lowers the relaxation to X/XO.
In vivo	In lung metastatic breast cancer mice, Succinobucol (40 mg/kg) by tail injection significantly reduces the average number of metastatic nodules. In rats, Succinobucol (50, 100, and 150 mg/kg, i.v.) has no significant effect on either heart rate or MAP.
Cell Research	In the metastatic 4T1 breast cancer cells, Succinobucol, SCB and the PCD polymer (equivalent concentration to SCB) are respectively added to each well with SCB concentrations ranging from 4 ng/mL to 40 μg/mL.
Animal Research	Mice, injected 4T1-luc cells, are treated with Succinobucol (40 mg/kg) by tail injection every three days.

Solubility Information

Solubility	DMSO: 45 mg/mL (72.94 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 (3.24 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	1.621 mL	8.1049 mL	16.2098 mL
5 mM	0.3242 mL	1.621 mL	3.242 mL
10 mM	0.1621 mL	0.8105 mL	1.621 mL
50 mM	0.0324 mL	0.1621 mL	0.3242 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

Houston SA, et al. An investigation of the antiplatelet effects of succinobucol (AGI-1067). Platelets. 2017 May;28 (3):295-300

Colle D, et al. Succinobucol, a Lipid-Lowering Drug, Protects Against 3-Nitropropionic Acid-Induced Mitochondrial Dysfunction and Oxidative Stress in SH-SY5Y Cells via Upregulation of Glutathione Levels and Glutamate Cysteine Ligase Activity. Mol Neurobiol. 2016 Mar;53(2):1280-95.

Dan Z, et al. A pH-Responsive Host-guest Nanosystem Loading Succinobucol Suppresses Lung Metastasis of Breast Cancer. Theranostics. 2016 Jan 25;6(3):435-45.