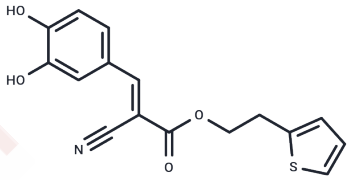
Data Sheet (Cat.No.T22502)

TargetMol

2-TEDC

Chemical Properties



CAS No. : 132465-10-2

Formula: C16H13NO4S

Molecular Weight: 315.34

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	2-TEDC is a potent lipoxygenase (LOX) inhibitor with inhibitory effects on 5-LOX, 12-LOX, and 15-LOX with IC50 values of 0.09 μM, 0.013 μM, and 0.5 μM, respectively.2-TEDC can be used in the study of atherosclerosis.
Targets(IC50)	Lipoxygenase
In vitro	2-TEDC exhibits potent inhibition against 5-, 12-, and 15-lipoxygenase, with IC50 values of 0.09 μM, 0.013 μM, and 0.5 μM, respectively.[1]

Solubility Information

Solubility	DMSO: 90 mg/mL (285.41 mM),Sonication is recommended. Ethanol: 25 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: 3.3 mg/mL (10.46 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	3.1712 mL	15.8559 mL	31.7118 mL
5 mM	0.6342 mL	3.1712 mL	6.3424 mL
10 mM	0.3171 mL	1.5856 mL	3.1712 mL
50 mM	0.0634 mL	0.3171 mL	0.6342 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

Cho H, et al. Novel caffeic acid derivatives: extremely potent inhibitors of 12-lipoxygenase. J Med Chem. 1991;34 (4):1503-1505.

Ni N, et al. Singapore Grouper Iridovirus Disturbed Glycerophospholipids Homeostasis: Cytosolic Phospholipase A2 Was Essential for Virus Replication. Int J Mol Sci. 2021;22(22):12597.