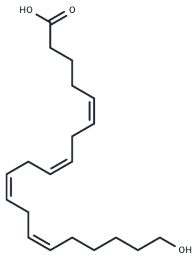
Data Sheet (Cat.No.T14021)

TargetMol

20-HETE

Chemical Properties



CAS No. : 79551-86-3

Formula: C20H32O3

Molecular Weight: 320.47

Storage: Store at low temperature
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	20-HETE promotes cell proliferation and migration in cancer and can be used to study prostate tumors and cardiac hypertrophy by activating the protein kinase C pathway to increase FBXO10 expression.
Targets(IC50)	PKC
In vitro	17-ODYA (1 μM) increased the activity of large-conductance Ca(2+)-activated K+ channels, and this effect was reversed by 20-HETE (10 nM). 20-HETE (1-1000 nM) reduced the diameter of isolated perfused small renal arteries in rats by approximately 15%, and TEA (1 mM) blocked the vasoconstrictor response to 20-HETE (100 nM)[1].
In vivo	20-HETE contributes to DHT-induced vascular remodeling, independent of blood pressure elevation[2].

Solubility Information

Solubility	DMSO: 2 mg/mL (6.24 mM),Sonication is recommended. Ethanol: 5 mg/mL (15.6 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.1204 mL	15.6021 mL	31.2042 mL
5 mM	0.6241 mL	3.1204 mL	6.2408 mL
10 mM	0.312 mL	1.5602 mL	3.1204 mL
50 mM	0.0624 mL	0.312 mL	0.6241 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 AP, et al. 20-HETE is an endogenous inhibitor of the large-conductance Ca(2+)-activated K+ channel in renal arterioles. Am J Physiol. 1996 Jan;270(1 Pt 2):R228-37.
Li B, Ma Y, Tan L, et al. 20-Hydroxytetraenoic acid induces hepatic fibrosis via the TGF-β1/Smad3 signaling pathway. Toxicology Letters. 2022
Ding Y, et al. 20-HETE induces remodeling of renal resistance arteries independent of blood pressure elevation in hypertension. Am J Physiol Renal Physiol. 2013 Sep 1;305(5):F753-63.
Lai G, et al. 20-HETE induces hyperglycemia through the cAMP/PKA-PhK-GP pathway. Mol Endocrinol. 2012 Nov;26 (11):1907-16.