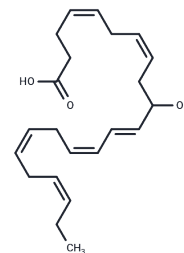


**(±)10-HDHA****Chemical Properties**

CAS No. :	90780-50-0
Formula:	C22H32O3
Molecular Weight:	344.495
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	(±)10-HDHA is an autoxidation product of docosahexaenoic acid (DHA) in vitro.[1][2] It is also produced from incubations of DHA in rat liver, brain, and intestinal microsomes.[3][4][5] (±)10-HDHA is a potential marker of oxidative stress in brain and retina where DHA is an abundant polyunsaturated fatty acid.
Targets(IC50)	Others

**Solubility Information**

Solubility	0.1 M Na <sub>2</sub> CO <sub>3</sub> : 2 mg/mL (5.81 mM),Sonication is recommended. Ethanol: Miscible DMSO: Miscible PBS (pH 7.2): 0.8 mg/mL (2.32 mM),Sonication is recommended. DMF: Miscible (< 1 mg/ml refers to the product slightly soluble or insoluble)
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**Preparing Stock Solutions**

	1mg	5mg	10mg
1 mM	2.9028 mL	14.5138 mL	29.0276 mL
5 mM	0.5806 mL	2.9028 mL	5.8055 mL
10 mM	0.2903 mL	1.4514 mL	2.9028 mL
50 mM	0.0581 mL	0.2903 mL	0.5806 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

VanRollins, M., and Murphy, R.C. Autooxidation of docosahexaenoic acid: Analysis of ten isomers of hydroxydocosahexaenoate. *J. Lipid Res.* 25(5), 507-517 (1984).

Reynaud, D., Thickitt, C.P., and Pace-Asciak, C.R. Facile preparation and structural determination of monohydroxy derivatives of docosahexaenoic acid (HDoHE) by  $\alpha$ -tocopherol-directed autoxidation. *Anal. Biochem.* 214(1), 165-170 (1993).

VanRollins, M., Baker, R.C., Sprecher, H., et al. Oxidation of docosahexaenoic acid by rat liver microsomes. *J. Biol. Chem.* 259(9), 5776-5783 (1984).

Yamane, M., Abe, A., and Yamane, S. High-performance liquid chromatography-thermospray mass spectrometry of epoxy polyunsaturated fatty acids and epoxyhydroxy polyunsaturated fatty acids from an incubation mixture of rat tissue homogenate. *J. Chromatogr.* 652(2), 123-136 (1994).

Kim, H.Y., Karanian, J.W., Shingu, T., et al. Stereochemical analysis of hydroxylated docosahexaenoates produced by human platelets and rat brain homogenate. *Prostaglandins* 40(5), 473-490 (1990).

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