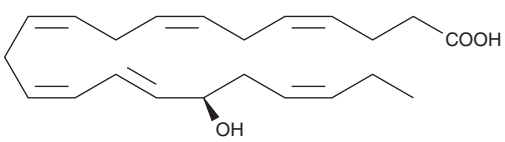
PRODUCT INFORMATION

17(R)-HDHA

Item No. 10005099

CAS Registry No.:	155976-53-9
Formal Name:	17R-hydroxy-4Z,7Z,10Z,13Z,15E,19Z-docosahexaenoic acid
Synonyms:	17(R)-hydroxy Docosahexaenoic Acid, 17(R)-HDoHE
MF:	$C_{22}H_{32}O_3$
FW:	344.5
Purity:	≥98%
UV/Vis.:	λ_{max}: 236 nm ε: 25,000
Supplied as:	A solution in ethanol
Storage:	-20°C
Stability:	≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

17(R)-HDHA is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO and dimethyl formamide purged with an inert gas can be used. 17(R)-HDHA is miscible in these solvents.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. If an organic solvent-free solution of 17(R)-HDHA is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of 17(R)-HDHA in PBS (pH 7.2) is approximately 0.8 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Resolvins are a group of polyhydroxylated metabolites of docosahexaenoic acid (DHA) found in the inflammatory exudates of aspirin-treated experimental animals.[1] 17(R)-HDHA is the primary oxygenation product of DHA when exposed to aspirin-inhibited cyclooxygenase-2. 17(R)-HDHA serves as a precursor to resolvins and has intrinsic biological activity, such as the inhibition of TNFα-induced IL-1β expression in human glioma cells and inhibition of TNFα-induced leukocyte trafficking to the murine air pouch.[1]

Reference

1. Serhan, C.N., Hong, S., Gronert, K., *et al.* Resolvins: A family of bioactive products of .omega.-3 fatty acid transformation circuits by aspirin treatment that counter proinflammation signals. *J. Exp. Med.* **196(8)**, 1025-1037 (2002).

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