



# 14-hydroxy Docosahexaenoic Acid

An inhibitor of platelet aggregation and smooth muscle contraction

# **Product Description**

Name :	14-hydroxy Docosahexaenoic Acid	Соон
Catalog Number :	(±) 14-HDOHE, solution in ethanol Q8625A, 25 $\mu g$	
	Q8625B, 50 µg	ОН
Structure :	$C_{22}H_{32}O_{3}$	
	CAS: [87042-40-8]	
<b>Molecular Weight :</b>	344.5	
Properties:	Soluble in DMSO, DMF, and PBS(pH 7.2) (~0.8 mg/ml).	

**Storage:** Store at -20° C

#### Introduction

 $(\pm)$ 14-HDoHE is an autoxidation product of docosahexaenoic acid (DHA) in vitro. It has been found to be produced from incubations of DHA in rat brain, intestinal microsomes and liver. It has been shown to act as an inhibitor of U-46619-induced human platelet aggregation and rabbit and rat aortic smooth muscle contraction (IC50 ~ 70, 3.6, and 5.3µM, respectively). ( $\pm$ )14-HDoHE may serve as a potential marker of oxidative stress in brain and retina where DHA is abundant.

## **Directions for use**

#### IC50

Inhibit rabbit aortic smooth muscle contraction:  $IC_{50} = 3.6 \ \mu\text{M}$ ; Inhibit rat aortic smooth muscle contraction:  $IC_{50} = 5.3 \ \mu\text{M}$ ; Inhibit U-46619-induced human platelet aggregation:  $IC_{50} = 70 \ \mu\text{M}$ 

## **Technical and Scientific Information**

#### References

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3. Aveldaño, M I., et al., 1983. Synthesis of hydroxy fatty acids from 4, 7, 10, 13, 16, 19-[1-14C] docosahexaenoic acid by human platelets. The Journal of biological chemistry. 258(15): 9339-43. PMID: 6223928

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6. Karanian, J W., et al., 1994. Inhibitory effects of n-6 and n-3 hydroxy fatty acids on thromboxane (U46619)-induced smooth muscle contraction. The Journal of pharmacology and experimental therapeutics. 270(3): 1105-9. PMID: 7932158

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# **Ordering information**

Catalog size quantities and prices may be found at <u>http://www.interchim.com</u>. Please inquire for higher quantities (availability, shipment conditions).

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