PRODUCT INFORMATION



(±)5-HETE lactone

Item No. 34215

CAS Registry No.:	81517-87-5	
Formal Name:	tetrahydro-6-(1E,3Z,6Z,9Z)-1,3,6,9-	0
	pentadecatetraen-1-yl-2H-pyran-2-one	
Synonym:	(±)5-Hydroxyeicosatetraenoic Acid lactone	
MF:	$C_{20}H_{30}O_{2}$	
FW:	302.5	
Purity:	≥98%	
UV/Vis.:	λ _{max} : 236 nm ε: 27,000	
Supplied as:	A solution in acetonitrile	
Storage:	-20°C	
Stability:	≥2 years	

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

Laboratory Procedures

(±)5-HETE lactone is supplied as a solution in acetonitrile. A stock solution may be made by dissolving the (\pm) 5-HETE lactone in the solvent of choice, which should be purged with an inert gas. (\pm) 5-HETE lactone is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of (±)5-HETE lactone in these solvents is approximately 50 mg/ml. .

(±)5-HETE lactone is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, (\pm) 5-HETE lactone should first be dissolved in acetonitrile and then diluted with the aqueous buffer of choice. The solubility of (±)5-HETE lactone in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

(±)5-HETE lactone is a cyclic ester formed by acid-catalyzed nucleophilic addition of the C-5 hydroxyl to the C-1 carboxyl of (±)5-HETE. (±)5-HETE lactone is an inhibitor of 5-lipoxygenase from rat basophilic leukemia cells with an IC₅₀ of 27 μ M. The lactone is several times more potent than the linear (±)5-HETE.¹

Reference

1. Kerdesky, F.A.J., Schmidt, S.P., Holms, J.H., et al. Synthesis and 5-lipoxygenase inhibitory activity of 5-hydroperoxy-6,8,11,14-eicosatetraenoic acid analogues. J. Med. Chem. 30, 1177-1186 (1987).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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