

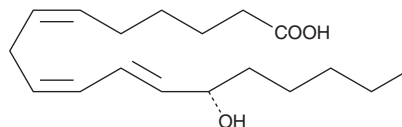
PRODUCT INFORMATION



13(S)-HOTrE(γ)

Item No. 39610

CAS Registry No: 74784-20-6
Formal Name: 13S-hydroxy-6Z,9Z,11E-octadecatrienoic acid
Synonym: 13(S)- γ -Linolenic Acid
MF: C₁₈H₃₀O₃
FW: 294.4
Purity: \geq 98%
UV/Vis.: λ_{max} : 236 nm
Supplied as: A solution in ethanol
Storage: -20°C
Stability: \geq 2 years



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

Laboratory Procedures

13(S)-HOTrE(γ) 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 ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. 13(S)-HOTrE(γ) is miscible in these solvents.

13(S)-HOTrE(γ) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of 13(S)-HOTrE(γ) should be diluted with the aqueous buffer of choice. The solubility of 13(S)-HOTrE(γ) in PBS (pH 7.2) is approximately 0.8 mg/ml. For greater aqueous solubility, 13(S)-HOTrE(γ) can be directly dissolved in 0.1 M Na₂CO₃ (2 mg/ml) and then diluted with PBS (pH 7.2) to achieve the desired concentration or pH. We do not recommend storing the aqueous solution for more than one day.

Description

13(S)-HOTrE(γ) is an active metabolite of the ω -6 fatty acid γ -linolenic acid (GLA; Item No. 90220).¹ It is formed from GLA by 15-lipoxygenase (15-LO). 13(S)-HOTrE(γ) is an inhibitor of 5-lipoxygenase (5-LO; IC₅₀ = 29 μ M for the rat enzyme).²

References

1. Itoh, T., Saito, T., Yamamoto, Y., *et al.* Gram scale synthesis of specialized pro-resolving mediator 17(S)-HDHA using lipoxygenase enhanced by water-soluble reducing agent TCEP. *Bioorg. Med. Chem. Lett.* **26(2)**, 343-345 (2016).
2. Haviv, F., Ratajczyk, J.D., DeNet, R.W., *et al.* Structural requirements for the inhibition of 5-lipoxygenase by 15-hydroxyeicosa-5,8,11,13-tetraenoic acid analogues. *J. Med. Chem.* **30(2)**, 254-263 (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.

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