

PRODUCT INFORMATION



Hepoxilin A₃ methyl ester Item No. 22151

Formal Name: methyl (5Z,9E)-8-hydroxy-10-((2S,3S)-3-((Z)-oct-2-en-1-yl)oxiran-2-yl)deca-5,9-dienoate

Synonyms: HxA₃ methyl ester, SFE 21:4;O2

MF: C₂₁H₃₄O₄

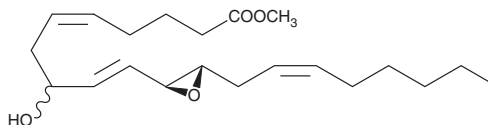
FW: 350.5

Purity: ≥98% (mixture of isomers)

Supplied as: A solution in hexane/1% triethylamine (TEA)

Storage: -80°C

Stability: ≥1 year



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

Laboratory Procedures

The naturally occurring free acid of HxA₃ is too unstable for storage. The methyl ester is provided because of its increased stability. However, both the free acid and the methyl ester decompose rapidly under acidic conditions. Before performing biological experiments, using HxA₃ free acid, the HxA₃ methyl ester must be hydrolyzed to HxA₃. Alkaline hydrolysis of HxA₃ methyl ester can be performed as follows:

Prepare a hydrolysis solution consisting of degassed acetone (8 ml) and 0.25 M NaOH (2 ml) and cool it to 0°C. Evaporate the hexane/1% TEA solution of HxA₃ methyl ester just to dryness under nitrogen and immediately add 4 ml of the hydrolysis solution per 1 mg of HxA₃ methyl ester. Allow the reaction to stand under an inert atmosphere of nitrogen or argon at 22°C for 40 minutes. The resulting basic solution of HxA₃ will be stable for about 60 minutes at room temperature or for 12 hours at 0°C. Dilutions of this HxA₃ stock solution can be made directly into aqueous buffers. Incorporation of albumin in the buffers will increase the stability of HxA₃ in aqueous media.¹ Solutions not used within 12 hours of hydrolysis should be discarded.

Description

HxA₃ methyl ester is an ester version of HxA₃ that more potently induces calcium release from intracellular stores and then induces calcium influx in suspended human neutrophils.¹ HxA₃ is produced from the intermediate 12-HpETE (Item Nos. 10138 | 44570) in the metabolic pathway for arachidonic acid (Item No. 90010).²

References

1. Reynaud, D., Demin, P.M., Sutherland, M., et al. *FEBS Lett.* **446**(2-3), 236-238 (1999).
2. Nigam, S. and Zafiriou, M.-P. *Biochem. Biophys. Res. Commun.* **338**(1), 161-168 (2005).

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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