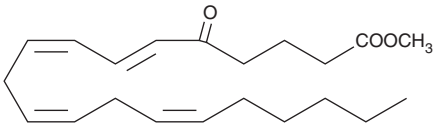
PRODUCT INFORMATION

5-OxoETE methyl ester

Item No. 26059

CAS Registry No.:	74785-00-5
Formal Name:	5-oxo-6E,8Z,11Z,14Z-eicosatetraenoic acid, methyl ester
Synonym:	5-KETE methyl ester
MF:	$C_{21}H_{32}O_3$
FW:	332.5
Purity:	≥95%
UV/Vis.:	λ_{max}: 280 nm
Supplied as:	A solution in ethanol
Storage:	-80°C
Stability:	≥2 years



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

Laboratory Procedures

5-OxoETE methyl ester 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. 5-OxoETE methyl ester 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 5-oxoETE methyl ester is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of 5-oxoETE methyl ester in PBS, pH 7.2, is approximately 0.8 mg/ml. For greater aqueous solubility, 5-oxoETE methyl ester can be directly dissolved in 0.1 M Na_2CO_3 (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

5-OxoETE methyl ester is an esterified form of the polyunsaturated keto acid 5-oxoETE (Item No. 34250). 5-OxoETE methyl ester is an agonist of oxoeicosanoid receptor 1 (OXER1; EC_{50} = 1.54 µM for β-arrestin recruitment) that has a higher maximal response than 5-oxoETE in a β-arrestin assay.[1]

Reference

1. Stepniewski, T.M., Torrens-Fontanals, M., Rodríguez-Espigares, I., *et al*. Synthesis, molecular modelling studies and biological evaluation of new oxoeicosanoid receptor 1 agonists. *Bioorg. Med. Chem.* **26(12)**, 3580-3587 (2018).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM