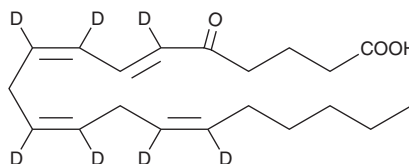


# PRODUCT INFORMATION



## 5-OxoETE-d<sub>7</sub> Item No. 334250

**CAS Registry No.:** 1881277-29-7  
**Formal Name:** 5-oxo-6E,8Z,11Z,14Z-eicosatetraenoic-6,8,9,11,12,14,15-d<sub>7</sub> acid  
**Synonym:** 5-KETE-d<sub>7</sub>  
**MF:** C<sub>20</sub>H<sub>23</sub>D<sub>7</sub>O<sub>3</sub>  
**FW:** 325.5  
**Chemical Purity:** ≥95% (5-OxoETE)  
**Deuterium Incorporation:** ≥99% deuterated forms (d<sub>1</sub>-d<sub>7</sub>); ≤1% d<sub>0</sub>  
**UV/Vis.:** λ<sub>max</sub>: 279 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-d<sub>7</sub> is intended for use as an internal standard for the quantification of 5-OxoETE (Item No. 34250) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

5-OxoETE-d<sub>7</sub> 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-d<sub>7</sub> is miscible in these solvents.

### Description

5-OxoETE is a polyunsaturated keto acid formed by the oxidation of 5-HETE in human neutrophils.<sup>1</sup> It stimulates cytosolic calcium levels in neutrophils with an EC<sub>50</sub> value of 2 nM.<sup>2</sup> 5-OxoETE selectively stimulates the migration and degranulation of eosinophils and activates the MAPK pathway in stimulated neutrophils.<sup>3,4</sup>

### References

1. Powell, W.S., Gravelle, F., and Gravel, S. Metabolism of 5(S)-hydroxy-6,8,11,14-eicosatetraenoic acid and other 5(S)-hydroxyeicosanoids by a specific dehydrogenase in human polymorphonuclear leukocytes. *J. Biol. Chem.* **267**, 19233-19241 (1992).
2. Powell, W.S., Zhang, Y., and Gravel, S. Effects of phorbol myristate acetate on the synthesis of 5-oxo-6,8,11,14-eicosatetraenoic acid by human polymorphonuclear leukocytes. *Biochemistry* **33**, 3927-3933 (1994).
3. O'Flaherty, J.T., Kuroki, M., Nixon, A.B., *et al.* 5-Oxo-eicosatetraenoate is a broadly active, eosinophil-selective stimulus for human granulocytes. *J. Immunol.* **157**, 336-342 (1996).
4. O'Flaherty, J.T., Kuroki, M., Nixon, A.B., *et al.* 5-Oxo-eicosanoids and hematopoietic cytokines cooperate in stimulating neutrophil function and the mitogen-activated protein kinase pathway. *J. Biol. Chem.* **271**, 17821-17828 (1996).

#### 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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