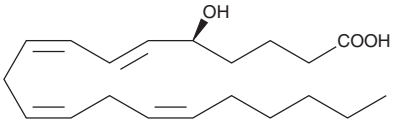
PRODUCT INFORMATION

5(S)-HETE MaxSpec® Standard

Item No. 10007243



CAS Registry No.: 70608-72-9
Formal Name: 5S-hydroxy-6E,8Z,11Z,14Z-eicosatetraenoic acid
Synonym: 5(S)-Hydroxyeicosatetraenoic Acid
MF: $C_{20}H_{32}O_3$
FW: 320.5
Purity: ≥95%
Supplied as: A solution in ethanol; in a deactivated glass ampule
Concentration: 10 µg/ml (nominal); see certificate of analysis for verified concentration
Storage: -20°C
Stability: ≥5 years; *Stability testing is ongoing to ensure concentration accuracy. The certificate of analysis and product expiry date will be updated upon completion of testing.*
Special Conditions: Store upright and unopened at -20°C. Warm to room temperature prior to opening. Light sensitive.

Description

5(S)-HETE is produced by the action of 5-LO on arachidonic acid to give 5(S)-HpETE, followed by reduction of the hydroperoxide. 5(S)-HETE has proliferative and chemotactic effects on granulocytes.[1] When further metabolized to 5-oxoETE, it is a more potent eosinophil chemoattractant than leukotriene B_4.[2,3]

5(S)-HETE MaxSpec® standard is a quantitative grade standard of 5(S)-HETE (Item No. 34230) that has been prepared specifically for mass spectrometry or any application where quantitative reproducibility is required. The solution has been prepared gravimetrically and is supplied in a deactivated glass ampule sealed under argon. The concentration was verified by comparison to an independently prepared calibration standard. This 5(S)-HETE MaxSpec® standard is guaranteed to meet identity, purity, stability, and concentration specifications and is provided with a batch-specific certificate of analysis. Ongoing stability testing is performed to ensure the concentration remains accurate throughout the shelf life of the product. ***Note:*** *The amount of solution added to the vial is in excess of the listed amount. Therefore, it is necessary to accurately measure volumes for preparation of calibration standards. Follow recommended storage and handling conditions to maintain product quality.*

References

1. Dodge, W. and Thomas, M. The effect of 5-hydroxyeicosatetraenoic acid on the proliferation of granulocyte progenitors and embryonic fibroblasts of the chick. *Biochem. Biophys. Res. Commun.* **131(2)**, 731-735 (1985).
2. Schwenk, U. and Schröder, J.M. 5-Oxo-eicosanoids are potent eosinophil chemotactic factors. Functional characterization and structural requirements. *J. Biol. Chem.* **270(25)**, 15029-15036 (1994).
3. 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(27)**, 19233-19241 (1992).

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