

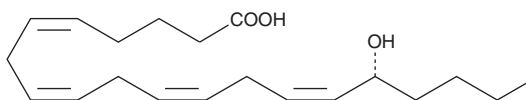
# PRODUCT INFORMATION



## 16(R)-HETE

Item No. 10004385

**CAS Registry No.:** 183509-22-0  
**Formal Name:** 16R-hydroxy-5Z,8Z,11Z,14Z-eicosatetraenoic acid  
**Synonym:** 16(R)-Hydroxyeicosatetraenoic Acid  
**MF:** C<sub>20</sub>H<sub>32</sub>O<sub>3</sub>  
**FW:** 320.5  
**Purity:** ≥95%  
**Supplied as:** A solution in ethanol  
**Storage:** -20°C  
**Stability:** ≥2 years



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

### Laboratory Procedures

16(R)-HETE 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. 16(R)-HETE 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 16(R)-HETE is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of 16(R)-HETE in PBS, pH 7.2, is approximately 0.8 mg/ml. For greater aqueous solubility, 16(R)-HETE can be directly dissolved in 0.1 M Na<sub>2</sub>CO<sub>3</sub> (solubility of 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

Electrolyte and fluid transport in the kidney are regulated in part by arachidonic acid and its metabolites. 16-HETE is a minor CYP450 metabolite of arachidonic acid released by the kidney upon angiotensin II stimulation that demonstrates stereospecific biological activity. Electrolyte and fluid transport in the kidney are regulated in part by arachidonic acid and its metabolites. 16-HETE is a minor CYP450 metabolite of arachidonic acid released by the kidney upon angiotensin II stimulation that demonstrates stereospecific biological activity. 16(R)-HETE inhibits proximal tubule ATPase activity by as much as 60% at a concentration of 2 μM.<sup>1</sup>

### Reference

1. Carroll, M.A., Balazy, M., Margiotta, P., *et al.* Cytochrome P-450-dependent HETEs: Profile of biological activity and stimulation by vasoactive peptides. *Am. J. Physiol.* **271**(4 Pt 2), R863-R869 (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.

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