

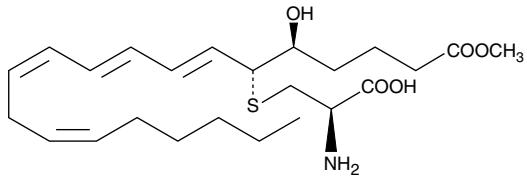
# Product Information



## Leukotriene E<sub>4</sub> methyl ester

Item No. 10007166

<b>Formal Name:</b>	5S-hydroxy-6R-(S-cysteinyl)- 7E,9E,11Z,14Z-eicosatetraenoic acid, methyl ester
<b>Synonym:</b>	LTE <sub>4</sub> methyl ester
<b>MF:</b>	C <sub>24</sub> H <sub>39</sub> NO <sub>5</sub>
<b>FW:</b>	453.6
<b>Purity:</b>	≥97%
<b>Stability:</b>	≥1 year at -80°C
<b>Supplied as:</b>	A solution in ethanol
<b>UV/Vis.:</b>	λ <sub>max</sub> : 281 nm
<b>Miscellaneous:</b>	Light Sensitive



### Laboratory Procedures

For long term storage, we suggest that leukotriene E<sub>4</sub> methyl ester (LTE<sub>4</sub> methyl ester) be stored as supplied at -80°C. It should be stable for at least one year.

LTE<sub>4</sub> 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. The solubility of LTE<sub>4</sub> methyl ester in these solvents is approximately 50 mg/ml.

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 LTE<sub>4</sub> methyl ester is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of LTE<sub>4</sub> methyl ester in PBS (pH 7.2) is approximately 0.1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

LTE<sub>4</sub> is produced by the action of a dipeptidase on LTD<sub>4</sub> leaving only the cysteinyl group still attached to the fatty acid backbone.<sup>1</sup> It is one of the constituents of slow-reacting substance of anaphylaxis (SRS-A).<sup>2</sup> LTE<sub>4</sub> is considerably less active (8 to 12-fold) than LTC<sub>4</sub> in the biological activities characteristic of cysteinyl LTs.<sup>1,3</sup> Unlike LTC<sub>4</sub> and LTD<sub>4</sub>, LTE<sub>4</sub> accumulates in both plasma and urine. Therefore, urinary excretion of LTE<sub>4</sub> is most often used as an indicator of asthma.<sup>4-6</sup> LTE<sub>4</sub> methyl ester is a more lipid soluble form of LTE<sub>4</sub>. The biological activity of LTE<sub>4</sub> methyl ester has not been reported.

### References

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