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## **Product Information**

Product ID T5610 CAS No. 14101-61-2

**Chemical Name** 

Synonym gamma-Tocotrienol

Formula C<sub>28</sub>H<sub>42</sub>O<sub>2</sub> Formula Wt. 410.63 **Melting Point** 

Purity ≥98%

Solubility Soluble in ethanol, hexanes, DMSO, DMF

## **Pricing and Availability**

Bulk quanitites available upon request

Product ID	Size	List Price
T5610	1 mg	\$92.00
T5610	5 mg	\$337.10
T5610	10 mg	\$561.40

Store Temp -20°C Ship Temp Ambient

Description Tocotrienols contain an arene ring, a chromanol ring, and an isoprenoid tail; all tocotrienol compounds contain a methyl group on C8 of the arene ring, y-Tocotrienol contains one additional methyl group on the arene ring, positioned ortho to C8. Tocotrienols are members of the vitamin E family, typically found in vegetable oils, nuts, and grains. Tocotrienols exhibit strong antioxidative, anti-angiogenic, anticancer, and anti-hyperlipidemic qualities, although γ-Tocotrienol displays the strongest lipid-lowering activity of all of the tocotrienol compounds. Tocopherols, common substituents of over-the-counter vitamin E supplements, interfere with tocotrienol activity and show weaker antioxidative effects. Tocotrienols exhibit significant radical recycling abilities in cellular models of lipid peroxidation and oxidative damage and suppress HMG-CoA reductase activity. In vitro, these compounds induce apoptosis through inhibition of Id1, EGFR, and NF-κB; they also inhibit vessel formation and proliferation in aortic endothelial cells.

References Yap WN, Chang PN, Han HY, et al. Gamma-tocotrienol suppresses prostate cancer cell proliferation and invasion through multiple-signalling pathways. Br J Cancer. 2008 Dec 2;99(11):1832-41. PMID: 19002171.

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Parker RA, Pearce BC, Clark RW, et al. Tocotrienols regulate cholesterol production in mammalian cells by post-transcriptional suppression of 3-hydroxy-3-methylglutaryl-coenzyme A reductase. J Biol Chem. 1993 May 25;268(15):11230-8. PMID: 8388388.

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Caution: This product is intended for laboratory and research use only. It is not for human or drug use.