



## Product Information

**Product ID** S2957

**CAS No.** 555-66-8

**Chemical Name**

**Synonym** 6-Shogaol

**Formula** C<sub>17</sub>H<sub>24</sub>O<sub>3</sub>

**Formula Wt.** 276.37

**Melting Point**

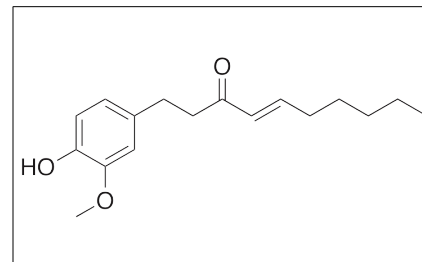
**Purity** ≥98%

**Solubility** 20mg/ml in ethanol, DMSO  
and DMF,  
sparingly soluble in aqueous  
buffers

**Store Temp** -20°C

**Ship Temp** Ambient

**Description** Shogaol is a originally found in species of *Zingiber*; it exhibits antiemetic, anticancer chemotherapeutic, anti-metastatic, chemopreventive, anti-ulcerative, anti-inflammatory, anticoagulant, and antinociceptive activities. Shogaol inhibits activation of STAT3, JAK2, and c-Src, decreases expression of Bcl-xl, Bcl-2, and survivin, and increases caspase-dependent apoptosis in breast cancer and prostate cancer cells; it also inhibits tumor growth. Shogaol also inhibits invasion and metastasis in hepatocellular carcinoma cells by decreasing expression of matrix metalloproteinases 2 and 9 (MMP2/9). Additionally, this compound also prevents TPA-induced tumor formation. In other animal models, shogaol decreases expression of iNOS, IL-1B, and TNF-α, preventing ulcer formation. Shogaol also inhibits 5-HT3 receptors, activates PPARγ, and decreases capsaicin-induced release of substance P.



## Pricing and Availability

**Bulk quantities available upon request**

Product ID	Size	List Price
S2957	5 mg	\$394.60
S2957	10 mg	\$568.60

**References** Kim SM, Kim C, Bae H, et al. 6-Shogaol exerts anti-proliferative and pro-apoptotic effects through the modulation of STAT3 and MAPKs signaling pathways. *Mol. Carcinog.* 2014 Jun 24. [Epub ahead of print]. PMID: 24962868.

Tan BS, Kang O, Mai CW, et al. 6-Shogaol inhibits breast and colon cancer cell proliferation through activation of peroxisomal proliferator activated receptor γ (PPARγ). *Cancer Lett.* 2013 Aug 9;336(1):127-39. PMID: 23612072.

Liao YR, Leu YL, Chan YY, et al. Anti-platelet aggregation and vasorelaxing effects of the constituents of the rhizomes of *Zingiber officinale*. *Molecules.* 2012 Jul 26;17(8):8928-37. PMID: 22836212.

Weng CJ, Chou CP, Ho CT, et al. Molecular mechanism inhibiting human hepatocarcinoma cell invasion by 6-shogaol and 6-gingerol. *Mol. Nutr. Food Res.* 2012 Aug;56(8):1304-14. PMID: 22714996.

Haniadka R, Rajeev AG, Palatty PL, et al. *Zingiber officinale* (ginger) as an anti-emetic in cancer chemotherapy: a review. *J. Altern. Complement. Med.* 2012 May;18(5):440-4. PMID: 22540971.

Wang Z, Hasegawa J, Wang X, et al. Protective Effects of Ginger against Aspirin-Induced Gastric Ulcers in Rats. *Yonago Acta Med.* 2011 Mar;54(1):11-9. PMID: 24031124.

Wu H, Hsieh MC, Lo CY, et al. 6-Shogaol is more effective than 6-gingerol and curcumin in inhibiting 12-O-tetradecanoylphorbol 13-acetate-induced tumor promotion in mice. *Mol. Nutr. Food Res.* 2010 Sep;54(9):1296-306. PMID: 20336681.

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