

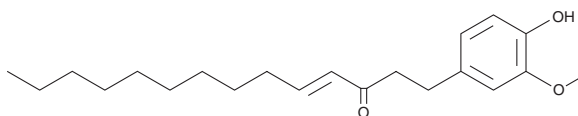
# PRODUCT INFORMATION



## 10-Shogaol

Item No. 36171

**CAS Registry No.:** 36752-54-2  
**Formal Name:** 1-(4-hydroxy-3-methoxyphenyl)-4-tetradecen-3-one  
**MF:** C<sub>21</sub>H<sub>32</sub>O<sub>3</sub>  
**FW:** 332.5  
**Purity:** ≥98%  
**Supplied as:** A neat liquid  
**Storage:** -20°C  
**Stability:** ≥2 years  
**Item Origin:** Plant/*Zingiber officinale*



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

### Laboratory Procedures

10-Shogaol is supplied as a neat liquid. A stock solution may be made by dissolving the 10-shogaol in the solvent of choice, which should be purged with an inert gas. 10-Shogaol is soluble in chloroform and methanol.

### Description

10-Shogaol is a phenol that has been found in *Z. officinale* and has diverse biological activities.<sup>1-3</sup> It selectively inhibits COX-2 over COX-1 (IC<sub>50</sub>s = 7.5 and >50 μM, respectively).<sup>1</sup> 10-Shogaol (100 and 200 μM) induces mortality in *A. cantonensis* larvae.<sup>3</sup> It scavenges DPPH (Item No. 14805) radicals in a cell-free assay when used at a concentration of 100 μM.<sup>2</sup> 10-Shogal (2 μM) increases proliferation of isolated human keratinocytes and fibroblasts and migration of isolated human keratinocytes in a wound healing assay.

### References

1. van Breemen, R.B., Tao, Y., and Li, W. Cyclooxygenase-2 inhibitors in ginger (*Zingiber officinale*). *Fitoterapia* **82(1)**, 38-43 (2011).
2. Chen, C.-Y., Cheng, K.-C., Chang, A.-Y., et al. 10-Shogaol, an antioxidant from *Zingiber officinale* for skin cell proliferation and migration enhancer. *Int. J. Mol. Sci.* **13(2)**, 1762-1777 (2012).
3. Lin, R.-J., Chen, C.-Y., Chung, L.-Y., et al. Larvicidal activities of ginger (*Zingiber officinale*) against *Angiostrongylus cantonensis*. *Acta Trop.* **115(1-2)**, 69-76 (2010).

#### 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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