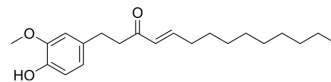


[10]-Shogaol

Cat. No.:	HY-N2434
CAS No.:	36752-54-2
Molecular Formula:	C ₂₁ H ₃₂ O ₃
Molecular Weight:	332.48
Target:	COX
Pathway:	Immunology/Inflammation
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (300.77 mM; Need ultrasonic)																							
	Preparing Stock Solutions	<table border="1"> <thead> <tr> <th rowspan="2">Solvent Concentration</th> <th colspan="3">Mass</th> </tr> <tr> <th>1 mg</th> <th>5 mg</th> <th>10 mg</th> </tr> </thead> <tbody> <tr> <td>1 mM</td> <td>3.0077 mL</td> <td>15.0385 mL</td> <td>30.0770 mL</td> </tr> <tr> <td>5 mM</td> <td>0.6015 mL</td> <td>3.0077 mL</td> <td>6.0154 mL</td> </tr> <tr> <td>10 mM</td> <td>0.3008 mL</td> <td>1.5038 mL</td> <td>3.0077 mL</td> </tr> </tbody> </table>	Solvent Concentration	Mass			1 mg	5 mg	10 mg	1 mM	3.0077 mL	15.0385 mL	30.0770 mL	5 mM	0.6015 mL	3.0077 mL	6.0154 mL	10 mM	0.3008 mL	1.5038 mL	3.0077 mL			
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Please refer to the solubility information to select the appropriate solvent.																								
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (7.52 mM); Clear solution																							
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: 2.5 mg/mL (7.52 mM); Suspended solution; Need ultrasonic																							
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (7.52 mM); Clear solution																							

BIOLOGICAL ACTIVITY

Description	[10]-Shogaol is an antioxidant from Zingiber officinale for human skin cell growth and a migration enhancer. [10]-Shogaol inhibits COX-2 with an IC ₅₀ of 7.5 μM and has antiproliferation activity ^{[1][2][3]} .
IC ₅₀ & Target	COX-2 7.5 μM (IC ₅₀)

CUSTOMER VALIDATION

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- Food Chem. 2024 Sep 15, 452, 139425.

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REFERENCES

- [1]. Chen CY, et al. 10-Shogaol, an antioxidant from Zingiber officinale for skin cell proliferation and migration enhancer. Int J Mol Sci. 2012;13(2):1762-77.
- [2]. van Breemen RB, et al. Cyclooxygenase-2 inhibitors in ginger (Zingiber officinale). Fitoterapia. 2011 Jan;82(1):38-43.
- [3]. Liu CM, et al. Ginger Phytochemicals Inhibit Cell Growth and Modulate Drug Resistance Factors in Docetaxel Resistant Prostate Cancer Cell. Molecules. 2017 Sep 5;22(9). pii: E1477.
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Caution: Product has not been fully validated for medical applications. For research use only.

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