

## 8-Shogaol Datasheet

4<sup>th</sup> Edition (Revised in July, 2016)

### [ Product Information ]

**Name:** 8-Shogaol

**Catalog No.:** CFN92299

**Cas No.:** 73069-25-7

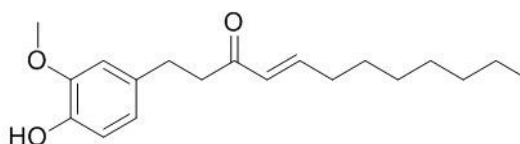
**Purity:** >98%

**M.F:** C<sub>19</sub>H<sub>28</sub>O<sub>3</sub>

**M.W:** 304.42

**Physical Description:** Powder

**Synonyms:** 1-(4-Hydroxy-3-methoxyphenyl)-4-dodecen-3-one.



### [ Intended Use ]

1. Reference standards;
2. Pharmacological research;
3. Food research;
4. Synthetic precursor compounds;
5. Intermediates & Fine Chemicals;
6. Others.

### [ Source ]

The rhizomes of *Zingiber officinale* Rosc.

### [ Biological Activity or Inhibitors ]

8-Shogaol, one of the pungent phenolic compounds in *ginger*, induces apoptosis in a time- and concentration-dependent manner via reactive oxygen species generation, glutathione depletion, and caspase activation in human leukemia cells.<sup>[1]</sup>

8-Shogaol, 8-gingerol, and 8-paradol exhibit anti-platelet activities with IC<sub>50</sub> values ranging from 3 to 7  $\mu$ M.<sup>[2]</sup>

Shogaols are metabolized extensively in mouse and human to form thiol-conjugated metabolites and glutathione (GSH) might play an important role in the cancer-preventive activity of ginger.<sup>[3]</sup>

8-Shogaol shows as active in vivo against cytotoxic drug-induced emesis, it has 5-HT<sub>3</sub> receptor blocking activity.<sup>[4]</sup>

## **[ Solvent ]**

Chloroform, Dichloromethane, Ethyl Acetate, DMSO, Acetone, etc.

## **[ HPLC Method ]<sup>[5]</sup>**

Mobile phase: Acetonitrile- H<sub>2</sub>O, gradient elution ;

Flow rate: 0.8 ml/min;

Column temperature: 25 °C;

The wave length of determination: 280 nm.

## **[ Storage ]**

2-8°C, Protected from air and light, refrigerate or freeze.

## **[ References ]**

[1] Pochuen S, Chen Y O, Daihuang K, *et al. J. Agr. Food Chem.*, 2010, 58(6):3847-54.

[2] Nurtjahja-Tjendraputra E, Ammit A J, Roufogalis B D, *et al. Thromb. Res.*, 2003, 111(4-5):259-65.

[3] Chen H, Soroka D N, Hu Y, *et al. Mol. Nutr.Food Res.*, 2013, 57(3):447–58.

[4] Abdelaziz H, Nahrstedt A, Petereit F, *et al. Planta Med.*, 2005, 71(7):609-16.

[5] Zhang L, Wang Z M, Wang W H, *et al. China Journal of Chinese Materia Medica*, 2008, 33(9):1010-3.

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