# **Product** Data Sheet

# 8-Gingerol

Cat. No.: HY-N0447 CAS No.: 23513-08-8 Molecular Formula:  $C_{19}H_{30}O_4$ Molecular Weight: 322.44

Target: TRP Channel; Bacterial

Pathway: Membrane Transporter/Ion Channel; Neuronal Signaling; Anti-infection

Storage: -20°C, sealed storage, away from moisture and light

\* In solvent: -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture

and light)

# **SOLVENT & SOLUBILITY**

### In Vitro

DMSO:  $\geq 100 \text{ mg/mL} (310.14 \text{ mM})$ 

\* "≥" means soluble, but saturation unknown.

| Preparing<br>Stock Solutions | Solvent Mass<br>Concentration | 1 mg      | 5 mg       | 10 mg      |
|------------------------------|-------------------------------|-----------|------------|------------|
|                              | 1 mM                          | 3.1014 mL | 15.5068 mL | 31.0135 mL |
|                              | 5 mM                          | 0.6203 mL | 3.1014 mL  | 6.2027 mL  |
|                              | 10 mM                         | 0.3101 mL | 1.5507 mL  | 3.1014 mL  |

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 (7.75 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (7.75 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (7.75 mM); Clear solution

# **BIOLOGICAL ACTIVITY**

Description

8-Gingerol, found in the rhizomes of ginger (Z. officinale) with oral bioavailability, activates TRPV1, with an EC<sub>50</sub> of 5.0 μM. 8-Gingerol inhibits COX-2, and inhibits the growth of H. pylori in vitro [1][2].

# **CUSTOMER VALIDATION**

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

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### **REFERENCES**

[1]. Dedov, V.N., et al. Gingerols: a novel class of vanilloid receptor (VR1) agonists. Br. J. Pharmacol. 137(6), 793-798 (2002).

[2]. Chrubasik, S., et al. Zingiberis rhizoma: A comprehensive review on the ginger effect and efficacy profiles. Phytomedicine 12(9), 684-701 (2005).

Caution: Product has not been fully validated for medical applications. For research use only.

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