# **Product** Data Sheet

# 3-Butylidenephthalide

Cat. No.: HY-N0336

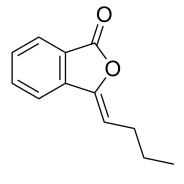
CAS No.: 551-08-6Molecular Formula:  $C_{12}H_{12}O_2$ Molecular Weight: 188.22Target: Parasite

Pathway: Anti-infection

**Storage:** 4°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: 250 mg/mL (1328.23 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	5.3129 mL	26.5647 mL	53.1293 mL
	5 mM	1.0626 mL	5.3129 mL	10.6259 mL
	10 mM	0.5313 mL	2.6565 mL	5.3129 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: ≥ 2.08 mg/mL (11.05 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (11.05 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (11.05 mM); Clear solution

### **BIOLOGICAL ACTIVITY**

Description	3-Butylidenephthalide (Butylidenephthalide) is a phthalic anhydride derivative identified in Ligusticum chuanxiong Hort, and has larvicidal activity ( $LC_{50}$ of 1.56 mg/g for Spodoptera litura larvae) <sup>[1]</sup> .
In Vitro	3-Butylidenephthalide (Butylidenephthalide) abrogates the myofibroblasts activation and mesenchymal transdifferentiation in oral submucous fibrosis <sup>[2]</sup> .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## **CUSTOMER VALIDATION**

• Biomed Pharmacother. 2023 May 18;164:114902.

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#### **REFERENCES**

[1]. Yi Y, et al. Z-Ligustilide Exerted Hormetic Effect on Growth and Detoxification Enzymes of Spodoptera lituraLarvae. Evid Based Complement Alternat Med. 2018 Jul 2;2018:7104513.

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

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