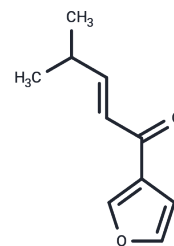


## Isoegomaketone

## Chemical Properties

CAS No. :	34348-59-9
Formula:	C <sub>10</sub> H <sub>12</sub> O <sub>2</sub>
Molecular Weight:	164.2
Storage:	Powder: -20°C for 3 years   In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



## Biological Description

Description	Isoegomaketone is a sesquiterpenoid isolated from the essential oil of <i>Perilla frutescens</i> . It exhibits a broad spectrum of pharmacological activities, including anti-inflammatory, antioxidant, anti-cancer, anti-mycobacterial, anti-arthritic, and anti-obesity effects. In immune modulation, it effectively suppresses the production of pro-inflammatory mediators. In the field of anti-infection, it has emerged as a potential novel inhibitor against drug-resistant pathogens such as <i>Mycobacterium abscessus</i> .
Targets(IC50)	Antibacterial, Immunology/Inflammation related
In vitro	Isoegomaketone suppresses LPS-induced NO and pro-inflammatory cytokines in RAW264.7 macrophages by inhibiting NF-κB and upregulating HO-1. It also shows potent activity against drug-resistant <i>Mycobacterium abscessus</i> , serving as a natural product lead for antibiotic development [2][3].

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	6.0901 mL	30.4507 mL	60.9013 mL
5 mM	1.218 mL	6.0901 mL	12.1803 mL
10 mM	0.609 mL	3.0451 mL	6.0901 mL
50 mM	0.1218 mL	0.609 mL	1.218 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Başer K H C, et al., Composition of the essential oil of *Perilla frutescens* (L.) Britton from Turkey[J]. Flavour and fragrance journal, 2003, 18(2): 122-123.

Kim HM, et al., 9-Hydroxy-isoegomaketone inhibits LPS-induced NO and inflammatory cytokine production in RAW264.7 cells. Mol Med Rep. 2021 Mar;23(3):181.

Kim HW, et al., Isoegomaketone exhibits potential as a new *Mycobacterium abscessus* inhibitor. Front Microbiol. 2024 Feb 23;15:1344914.

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