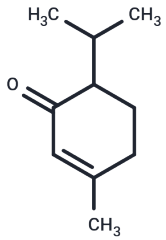
# Data Sheet (Cat.No.T8256)

TargetMol

piperitone

## Chemical Properties



CAS No. : 89-81-6

Formula: C10H16O

Molecular Weight: 152.23

Storage: Pure form: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

## Biological Description

| | |
|---|---|
| Description | piperitone is a natural compound from Piper nigrum L |
| Targets(IC50) | Others |
| In vitro | piperitone from essential oils as specific inhibitors of trichothecene production by Fusarium graminearum[1]. |

## Solubility Information

| | |
|---|---|
| Solubility | DMSO: 250 mg/mL (1642.25 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |
| In vivo Formulation | 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (65.69 mM),Solution.<br>10% DMSO+90% Saline: < 10 mg/mL (65.69 mM),Lower concentrations may be soluble, but exact solubility limit is unknown.<br>*Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.* |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 6.569 mL | 32.845 mL | 65.6901 mL |
| 5 mM | 1.3138 mL | 6.569 mL | 13.138 mL |
| 10 mM | 0.6569 mL | 3.2845 mL | 6.569 mL |
| 50 mM | 0.1314 mL | 0.6569 mL | 1.3138 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

Yaguchi A , Yoshinari T , Tsuyuki R , et al. Isolation and Identification of Precocenes and Piperitone from Essential Oils as Specific Inhibitors of Trichothecene Production by\r, Fusarium graminearum[J]. Journal of Agricultural & Food Chemistry, 2009, 57(3):846-851.

Picard M , Lytra G , Tempere S , et al. Identification of Piperitone as an Aroma Compound Contributing to the Positive Mint Nuances Perceived in Aged Red Bordeaux Wines[J]. Journal of Agricultural & Food Chemistry, 2016: acs.jafc.5b04869.