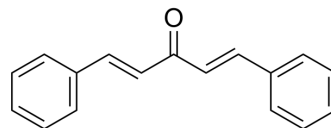


## Dibenzylideneacetone

Cat. No.:	HY-75828		
CAS No.:	538-58-9		
Molecular Formula:	C <sub>17</sub> H <sub>14</sub> O		
Molecular Weight:	234.29		
Target:	Bacterial		
Pathway:	Anti-infection		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 100 mg/mL (426.82 mM; Need ultrasonic)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	4.2682 mL	21.3411 mL	42.6821 mL
	5 mM	0.8536 mL	4.2682 mL	8.5364 mL
	10 mM	0.4268 mL	2.1341 mL	4.2682 mL

Please refer to the solubility information to select the appropriate solvent.

### BIOLOGICAL ACTIVITY

#### Description

Dibenzylideneacetone is a small molecule inhibitor of *Botrytis cinerea* chitinase with an IC<sub>50</sub> of 13.10 µg/mL. The MIC of *Botrytis cinerea* was 32 µg/mL, and the EC<sub>50</sub> values for inhibiting mycelial growth and spore germination were 16.29 and 14.64 µg/mL, respectively. Dibenzylideneacetone is a potential antifungal agent for fruit preservation, which effectively extends the preservation time of cherries<sup>[1]</sup>.

#### IC<sub>50</sub> & Target

Chitinase<sup>[1]</sup>

### REFERENCES

[1]. Niu X, Wang Z, Wang C, Wang H. Dibenzylideneacetone Overcomes *Botrytis cinerea* Infection in Cherry Tomatoes by Inhibiting Chitinase Activity. *J Agric Food Chem*. 2023 Nov 1.

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

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