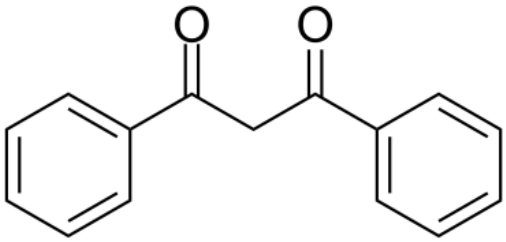
Product Data Sheet

Product Name: Dibenzoylmethane
Cat. No.: GC61419

Chemical Properties

Cas. No.	120-46-7		
SMILES	O=C(C1=CC=CC=C1)CC(C2=CC=CC=C2)=O		
Formula	$C_{15}H_{12}O_2$	M.Wt	224.26
Solubility	DMSO : 100 mg/mL (445.91 mM; Need ultrasonic)	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure			



Background

Dibenzoylmethane, a minor ingredient in licorice, activates Nrf2 and prevents various cancers and oxidative damage. Dibenzoylmethane, an analog of curcumin, results in dissociation from Keap1 and nuclear translocation of Nrf2[1].

Dibenzoylmethane (10, 20, 30, 40, 50 μM; 6 hours) treatment concentration-dependently increases

the mRNA level of HO-1 but has no effect on the mRNA level of Nrf2 in HepG2 cells. Dibenzoylmethane induces HO-1 and Nrf2 protein expression, and the induction diminishes after 12 h[1]. Dibenzoylmethane (10, 20, 30, 40, 50 μM; 2 hours) concentration-dependently increases the phosphorylated protein levels of Erk1/2, p38MAPK, JNK, AMPK, and Akt in HepG2 cells.Dibenzoylmethane does not show significant cytotoxicity[1].

Dibenzoylmethane (200, 500 mg/kg/day; ip; for three consecutive days) pretreatment significantly reduces both the area and the severity of necrosis, as well as the leukocyte infiltration, at a dose of 200 mg/kg in wild-type and Nrf2 knockout mice[1]. Dibenzoylmethane protectes against CCl4-induced (1:49,v/v, 10 ml/kg) liver damage in wild-type mice[1].

[1]. Mingnan Cao, et al. Dibenzoylmethane Protects Against CCl4-Induced Acute Liver Injury by Activating Nrf2 via JNK, AMPK, and Calcium Signaling. AAPS J. 2017 Nov;19(6):1703-1714.

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