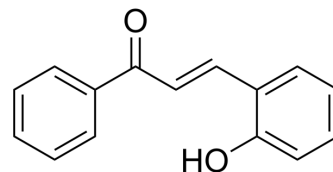


2-Hydroxychalcone

Cat. No.:	HY-119931
CAS No.:	644-78-0
Molecular Formula:	C ₁₅ H ₁₂ O ₂
Molecular Weight:	224.25
Target:	Bcl-2 Family; Apoptosis; NF-κB; Parasite
Pathway:	Apoptosis; NF-κB; 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 : 125 mg/mL (557.41 mM; Need ultrasonic)						
	Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg	
				1 mM	4.4593 mL	22.2965 mL	44.5931 mL
				5 mM	0.8919 mL	4.4593 mL	8.9186 mL
				10 mM	0.4459 mL	2.2297 mL	4.4593 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 (9.28 mM); Clear solution						
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (9.28 mM); Clear solution						

BIOLOGICAL ACTIVITY

Description	2-hydroxychalcone, a natural flavonoid, is a potent antioxidant, inhibiting lipid peroxidation. 2-Hydroxychalcone induces apoptosis by Bcl-2 downregulation. 2-Hydroxychalcone inhibits the activation of NF-κB ^{[1][2][3]} .
In Vitro	2-Hydroxychalcone inhibits invasion of triple negative breast cancer cells ^[1] . 2-hydroxychalcone inhibits the adhesion of peripheral neutrophils to the endothelial cell monolayers by inhibiting the expression of ICAM-1, VCAM-1, and E-selectin in a concentration-dependent manner ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Sun Young Kim, et al. 2-Hydroxychalcone and Xanthohumol Inhibit Invasion of Triple Negative Breast Cancer Cells. Chem Biol Interact. 2013 May 25;203(3):565-72.

[2]. B Madan, et al. 2'-hydroxychalcone Inhibits Nuclear factor-kappaB and Blocks Tumor Necrosis Factor-Alpha- And Lipopolysaccharide-Induced Adhesion of Neutrophils to Human Umbilical Vein Endothelial Cells. Mol Pharmacol. 2000 Sep;58(3):526-34.

[3]. BABITA MADAN, et al. 2-Hydroxychalcone Inhibits Nuclear Factor-kB and Blocks Tumor Necrosis Factor-a- and Lipopolysaccharide-Induced Adhesion of Neutrophils to Human Umbilical Vein Endothelial Cells. Mol Pharmacol 58:526-534, 2000.

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

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