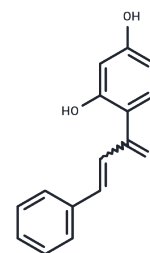


## 2',4'-DIHYDROXYCHALCONE

## Chemical Properties

CAS No. :	1776-30-3
Formula:	C <sub>15</sub> H <sub>12</sub> O <sub>3</sub>
Molecular Weight:	240.25
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	2',4'-DIHYDROXYCHALCONE (2',4'-DHC) as a compound with Hsp90 inhibitory and antifungal effects
Targets(IC50)	HSP,Antibacterial
In vitro	In the presence of 2',4'-DHC (8 g/mL), radial growth of <i>Aspergillus fumigatus</i> was inhibited 20% compared to the control, and green pigmentation was completely blocked. The expression of the conidiation-associated genes <i>abaA</i> , <i>brlA</i> , and <i>wetA</i> was significantly decreased (approximately 3- to 5-fold) by treatment with 2',4'-DHC. The expression of calcineurin signaling components, <i>cnaA</i> and <i>crzA</i> , was also significantly reduced. The inhibitory effects of 2',4'-DHC on metabolic activity and mycelial growth were significantly enhanced by combination treatment with itraconazole and caspofungin. Docking studies indicated that 2',4'-DHC bind to the ATPase domain of Hsp90. 2',4'-DHC act as an Hsp90-calcineurin pathway inhibitor[1].

## Solubility Information

Solubility	DMSO: 11.9 mg/mL (49.53 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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### Preparing Stock Solutions

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	1mg	5mg	10mg
1 mM	4.1623 mL	20.8117 mL	41.6233 mL
5 mM	0.8325 mL	4.1623 mL	8.3247 mL
10 mM	0.4162 mL	2.0812 mL	4.1623 mL
50 mM	0.0832 mL	0.4162 mL	0.8325 mL

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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

Seo Y H , Kim S S , Shin K S . In Vitro Antifungal Activity and Mode of Action of 2',4'-Dihydroxychalcone against *Aspergillus fumigatus*]. *Mycobiology*, 2015, 43(2):150-156.

Saba I , Nayab B , Subhra P , et al. Identification of 2',4'-Dihydroxychalcone as an Antivirulence Agent Targeting HlyU, a Master Virulence Regulator in *Vibrio vulnificus*]. *Molecules*, 2018, 23(6):1492-.

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