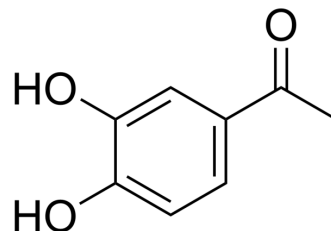


3',4'-Dihydroxyacetophenone

Cat. No.:	HY-N1775		
CAS No.:	1197-09-7		
Molecular Formula:	C ₈ H ₈ O ₃		
Molecular Weight:	152.15		
Target:	Tyrosinase		
Pathway:	Metabolic Enzyme/Protease		
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 : 50 mg/mL (328.62 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	6.5725 mL	32.8623 mL	65.7246 mL
		5 mM	1.3145 mL	6.5725 mL	13.1449 mL
10 mM		0.6572 mL	3.2862 mL	6.5725 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: ≥ 2.5 mg/mL (16.43 mM); Clear solution				
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (16.43 mM); Clear solution				
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (16.43 mM); Clear solution				

BIOLOGICAL ACTIVITY

Description	3',4'-Dihydroxyacetophenone (3,4-DHAP), isolated from Picea Schrenkiana Needles exhibits a strong suppressive action against tyrosinase activity, with an IC ₅₀ of 10 μM. 3',4'-Dihydroxyacetophenone (3,4-DHAP) is a vasoactive agent and antioxidant ^{[1][2]} .
IC ₅₀ & Target	IC50: 10 μM (Tyrosinase) ^[1] .

REFERENCES

- [1]. You Jung Kim, et al. Antimelanogenic Activity of 3,4-dihydroxyacetophenone: Inhibition of Tyrosinase and MITF. *Biosci Biotechnol Biochem*. 2006 Feb;70(2):532-4.
- [2]. Xiao Ruan, et al. Autotoxicity and Allelopathy of 3,4-dihydroxyacetophenone Isolated From *Picea Schrenkiana* Needles. *Molecules*. 2011 Oct 24;16(10):8874-93.
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Caution: Product has not been fully validated for medical applications. For research use only.

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