## 4-Hydroxyphenyl acetate

MedChemExpress

®

Cat. No.:	HY-30267		
CAS No.:	3233-32-7		
Molecular Formula:	$C_8H_8O_3$		
Molecular Weight:	152.15		
Target:	Endogenous Metabolite		
Pathway:	Metabolic Enzyme/Protease		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year

## SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (657.25 mM; Need ultrasonic)					
Preparing Stock Solutions	Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg	
		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); Suspended solution; Need ultrasonic					
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (16.43 mM); Clear solution					

DIOLOGICAL ACTIVI				
Description	4-Hydroxyphenyl acetate (4-HPA) is a natural antioxidant and protects cells from oxidative stress-induced necrosis. 4- Hydroxyphenyl acetate blocks the increase of cellular ROS induced by oxidative stress, and up-regulates NQO1 and HO-1 genes by stabilizing and inducing the nuclear translocation of NRF2 transcription factor <sup>[1]</sup> .			
In Vitro	<ul> <li>4-Hydroxyphenyl acetate (5 μM; 24 h) protects retinal pigment epithelial (RPE) cells from oxidative stress-induced cell death <sup>[1]</sup>.</li> <li>4-Hydroxyphenyl acetate (5 μM; 24 h; ARPE-19 cells) inhibits the increase of ROS in response to oxidative stress and up-</li> </ul>			

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regulated the expression MCE has not independen Cell Viability Assay <sup>[1]</sup>	regulated the expression of cytoprotective genes including NQO1 and HO-1 genes <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only. Cell Viability Assay <sup>[1]</sup>	
Cell Line:	ARPE-19 cells	
Concentration:	5 μΜ	
Incubation Time:	24 hours	
Result:	Protected up to 89%, 92%, and 90% of ARPE-19 cells exposed to 100, 200, and 300 $\mu M$ tBHP, respectively.	

## REFERENCES

[1]. Hanus J, et, al. 4-Acetoxyphenol Prevents RPE Oxidative Stress-Induced Necrosis by Functioning as an NRF2 Stabilizer. Invest Ophthalmol Vis Sci. 2015 Aug;56(9):5048-59.

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

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