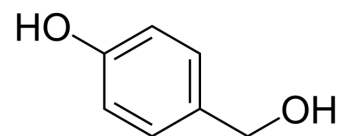


4-Hydroxybenzyl alcohol

Cat. No.:	HY-Y0892		
CAS No.:	623-05-2		
Molecular Formula:	C ₇ H ₈ O ₂		
Molecular Weight:	124.14		
Target:	Apoptosis; Endogenous Metabolite		
Pathway:	Apoptosis; 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 : 50 mg/mL (402.77 mM; Need ultrasonic)					
		Solvent Concentration	Mass	1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM		8.0554 mL	40.2771 mL	80.5542 mL
		5 mM		1.6111 mL	8.0554 mL	16.1108 mL
10 mM			0.8055 mL	4.0277 mL	8.0554 mL	
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (20.14 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (20.14 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (20.14 mM); Clear solution 					

BIOLOGICAL ACTIVITY

Description	4-Hydroxybenzyl alcohol is a phenolic compound widely distributed in various kinds of plants. Anti-inflammatory, anti-oxidant, anti-nociceptive activity. Neuroprotective effect. Inhibitor of tumor angiogenesis and growth ^{[1][2][3][4]} .
IC ₅₀ & Target	Human Endogenous Metabolite
In Vitro	4-Hydroxybenzyl alcohol inhibits proliferation of eEND2 cells and suppresses the migration of eEND2 cells, accompanied by inhibition of actin filament reorganization ^[2] .

4-Hydroxybenzyl alcohol induces apoptotic death of tumor cells^[3].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

4-Hydroxybenzyl alcohol possesses antiangiogenic, anti-inflammatory and anti-nociceptive activity possibly via its down-regulating activity on NO production^[1].

4-Hydroxybenzyl alcohol (200 mg/kg) efficiently inhibits growth and angiogenesis of developing tumors^[3].

4-Hydroxybenzyl alcohol ameliorates ischemic injury induced by transient focal cerebral ischemia in rats, and this neuroprotective effect may be partly related to attenuate apoptosis pathway^[4].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Ann N Y Acad Sci. 2023 Sep 2.

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REFERENCES

[1]. Lim EJ, et al. Anti-angiogenic, anti-inflammatory and anti-nociceptive activity of 4-hydroxybenzyl alcohol. J Pharm Pharmacol. 2007 Sep;59(9):1235-40.

[2]. Laschke MW, et al. In vitro and in vivo evaluation of the anti-angiogenic actions of 4-hydroxybenzyl alcohol. Br J Pharmacol. 2011 Jun;163(4):835-44.

[3]. Laschke MW, et al. 4-hydroxybenzyl alcohol: a novel inhibitor of tumor angiogenesis and growth. Life Sci. 2013 Jul 19;93(1):44-50.

[4]. Yu SS, et al. Neuroprotective effect of 4-hydroxybenzyl alcohol against transient focal cerebral ischemia via anti-apoptosis in rats. Brain Res. 2010 Jan 13;1308:167-75.

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

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