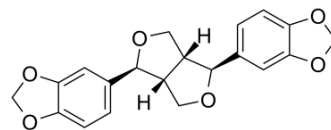


Sesamin

Cat. No.:	HY-N0121		
CAS No.:	607-80-7		
Molecular Formula:	C ₂₀ H ₁₈ O ₆		
Molecular Weight:	354.35		
Target:	Others		
Pathway:	Others		
Storage:	Powder	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro	DMSO : 120 mg/mL (338.65 mM; Need ultrasonic)					
	Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg
			1 mM	2.8221 mL	14.1103 mL	28.2207 mL
			5 mM	0.5644 mL	2.8221 mL	5.6441 mL
			10 mM	0.2822 mL	1.4110 mL	2.8221 mL
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	1. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 3 mg/mL (8.47 mM); Clear solution 2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 3 mg/mL (8.47 mM); Clear solution					

BIOLOGICAL ACTIVITY

Description	Sesamin, abundant lignan found in sesame oil, is a potent and selective delta 5 desaturase inhibitor in polyunsaturated fatty acid biosynthesis. Sesamin exerts effective neuroprotection against cerebral ischemia ^{[1][2]} .
IC ₅₀ & Target	delta 5 desaturase ^[1]
In Vitro	Pretreated with sesamin, Excess generation of nitric oxide in lipopolysaccharide-stimulated rat primary microglia cells was significantly attenuated ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Sesamin (o.p.; 20 mg/kg/day) significantly reduces the infarct size by approximately 50% in male gerbils (60-85 g) ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Cheng FC, et al. Neuroprotective effects of sesamin and sesamol in gerbil brain in cerebral ischemia. *Int J Biomed Sci.* 2006 Sep;2(3):284-8.
- [2]. Shimizu S, et al. Sesamin is a potent and specific inhibitor of delta 5 desaturase in polyunsaturated fatty acid biosynthesis. *Lipids.* 1991 Jul;26(7):512-6.
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Caution: Product has not been fully validated for medical applications. For research use only.