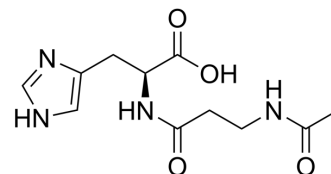


N-Acetylcarnosine

Cat. No.:	HY-133026
CAS No.:	56353-15-2
Molecular Formula:	C ₁₁ H ₁₆ N ₄ O ₄
Molecular Weight:	268.27
Target:	Others
Pathway:	Others
Storage:	Sealed storage, away from moisture
	Powder -80°C 2 years
	-20°C 1 year

* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro	H ₂ O : 250 mg/mL (931.90 mM; Need ultrasonic)					
	Preparing Stock Solutions	<div><div>Solvent</div><div>Concentration</div></div>	Mass	1 mg	5 mg	10 mg
		1 mM	3.7276 mL	18.6379 mL	37.2759 mL	
		5 mM	0.7455 mL	3.7276 mL	7.4552 mL	
	10 mM	0.3728 mL	1.8638 mL	3.7276 mL		
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	1. Add each solvent one by one: PBS					
	Solubility: 100 mg/mL (372.76 mM); Clear solution; Need ultrasonic					

BIOLOGICAL ACTIVITY

Description	N-Acetylcarnosine, a natural histidine-containing dipeptide, is a source of pharmacological principal L-carnosine. N-Acetylcarnosine is a potent ophthalmic agent in human cataracts ^[1] .
In Vivo	Right eyes of the rabbits (male grey chinchilla rabbits aged 3-4 months weighing 2-3 k) are instilled with 80 µL of formulation A containing 1 % N-Acetylcarnosine. The N-Acetylcarnosine prodrug eye drops optimize the clinical effects for the treatment of ophthalmic disorders (such as prevention and reversal of cataracts in human and animal eyes) ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Babizhayev MA, et al. N-Acetylcarnosine, a natural histidine-containing dipeptide, as a potent ophthalmic drug in treatment of human cataracts. Peptides. 2001

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[2]. Dubois VD, et al. N-acetylcarnosine (NAC) drops for age-related cataract. Cochrane Database Syst Rev. 2017 Feb 28;2:CD009493.

[3]. Babizhayev MA, et al. Potentiation of intraocular absorption and drug metabolism of N-acetylcarnosine lubricant eye drops: drug interaction with sight threatening lipid peroxides in the treatment for age-related eye diseases. Drug Metabol Drug Interact. 2009;24(2-4):275-323.

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

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