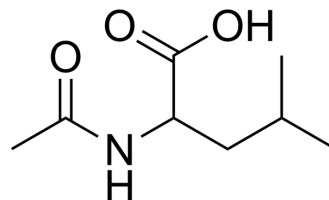


Acetylleucine

Cat. No.:	HY-B1442
CAS No.:	99-15-0
Molecular Formula:	C ₈ H ₁₅ NO ₃
Molecular Weight:	173.21
Target:	Others
Pathway:	Others
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 : 120 mg/mL (692.80 mM; Need ultrasonic)
 H₂O : 6.67 mg/mL (38.51 mM; Need ultrasonic)

	Solvent Concentration	Mass	1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM		5.7733 mL	28.8667 mL	57.7334 mL
	5 mM		1.1547 mL	5.7733 mL	11.5467 mL
	10 mM		0.5773 mL	2.8867 mL	5.7733 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- Add each solvent one by one: PBS
Solubility: 4 mg/mL (23.09 mM); Clear solution; Need ultrasonic and warming and heat to 60°C
- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 3 mg/mL (17.32 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 3 mg/mL (17.32 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 3 mg/mL (17.32 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Acetylleucine (N-Acetyl-DL-leucine), orally active compound, can be used for the research of acute vestibular vertigo, cerebellar ataxia and nystagmus^{[1][2]}.

In Vivo

Acetylleucine (60 mg/kg, i.v., on days 1, 2 and 3 after unilateral labyrinthectomy (UL)) accelerates compensation of postural

symptoms but not of nystagmus or head roll tilt after UL in rats^[3].

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

REFERENCES

- [1]. Günther L, et al. N-acetyl-L-leucine accelerates vestibular compensation after unilateral labyrinthectomy by action in the cerebellum and thalamus. PLoS One. 2015 Mar 24;10(3):e0120891.
- [2]. Feil K, et, al. Update on the Pharmacotherapy of Cerebellar Ataxia and Nystagmus. Cerebellum. 2016 Feb;15(1):38-42.
- [3]. Clément G, et, al. Effects of vestibular training on motion sickness, nystagmus, and subjective vertical. J Vestib Res. 2007;17(5-6):227-37.
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Caution: Product has not been fully validated for medical applications. For research use only.

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