Proteins

Screening Libraries

Acetylleucine

Cat. No.: HY-B1442 CAS No.: 99-15-0 Molecular Formula: $C_8H_{15}NO_3$ Molecular Weight: 173.21 Others Target: Pathway: Others

Storage: Powder -20°C

3 years 2 years

-80°C In solvent 2 years

> -20°C 1 year

Product Data Sheet

SOLVENT & SOLUBILITY

In Vitro

DMSO: 120 mg/mL (692.80 mM; Need ultrasonic) H₂O: 6.67 mg/mL (38.51 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	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

- 1. 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
- 2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 3 mg/mL (17.32 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 3 mg/mL (17.32 mM); Clear solution
- 4. 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.

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

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