

Product Data Sheet

L-Alanine, N-[(S)-(4-nitrophenoxy)phenoxyphosphinyl]-, 1-methylethyl ester

 Cat. No.:
 HY-79333

 CAS No.:
 1256490-31-9

 Molecular Formula:
 C₁₈H₂₁N₂O₇P

 Molecular Weight:
 408.34

Target: Amino Acid Derivatives

Pathway: Others

Storage: Powder -20°C 3 years

In solvent

4°C 2 years -80°C 6 months

-20°C 1 month

SOLVENT & SOLUBILITY

In Vitro

DMSO: 100 mg/mL (244.89 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.4489 mL	12.2447 mL	24.4894 mL
	5 mM	0.4898 mL	2.4489 mL	4.8979 mL
	10 mM	0.2449 mL	1.2245 mL	2.4489 mL

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

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (6.12 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (6.12 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (6.12 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

L-Alanine, N-[(S)-(4-nitrophenoxy)phenoxyphosphinyl]-, 1-methylethyl ester is an alanine derivative^[1].

In Vitro

Amino acids and amino acid derivatives have been commercially used as ergogenic supplements. They influence the secretion of anabolic hormones, supply of fuel during exercise, mental performance during stress related tasks and prevent exercise induced muscle damage. They are recognized to be beneficial as ergogenic dietary substances^[1].

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

REFERENCES
[1]. Luckose F, et al. Effects of amino acid derivatives on physical, mental, and physiological activities. Crit Rev Food Sci Nutr. 2015;55(13):1793-1029.
Caution: Product has not been fully validated for medical applications. For research use only.
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