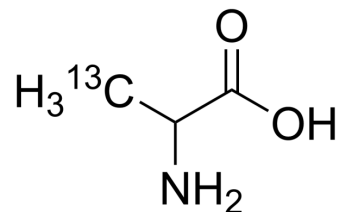


DL-Alanine-¹³C-3

Cat. No.:	HY-N2362S1
CAS No.:	131157-42-1
Molecular Formula:	C ₂ ¹³ CH ₇ NO ₂
Molecular Weight:	90.09
Target:	Endogenous Metabolite; Isotope-Labeled Compounds
Pathway:	Metabolic Enzyme/Protease; Others
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

H₂O : 125 mg/mL (1387.50 mM; Need ultrasonic)

Concentration	Mass			
	1 mg	5 mg	10 mg	
1 mM	11.1000 mL	55.5001 mL	111.0001 mL	
5 mM	2.2200 mL	11.1000 mL	22.2000 mL	
10 mM	1.1100 mL	5.5500 mL	11.1000 mL	

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

BIOLOGICAL ACTIVITY

Description

DL-Alanine-¹³C-3 is the ¹³C-labeled DL-Alanine. DL-alanine, an amino acid, is the racemic compound of L- and D-alanine. DL-alanine is employed both as a reducing and a capping agent, used with silver nitrate aqueous solutions for the production of nanoparticles. DL-alanine can be used for the research of transition metals chelation, such as Cu(II), Zn(II), Cd(II). DL-alanine, a sweetener, is classed together with glycine, and sodium saccharin. DL-alanine plays a key role in the glucose-alanine cycle between tissues and liver[1][2][3][4][5][6].

In Vitro

Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs^[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019;53(2):211-216.

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

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