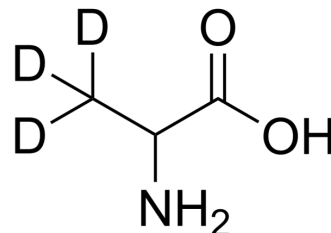


DL-Alanine-d₃

Cat. No.:	HY-N2362S2		
CAS No.:	53795-94-1		
Molecular Formula:	C ₃ H ₄ D ₃ NO ₂		
Molecular Weight:	92.11		
Target:	Endogenous Metabolite		
Pathway:	Metabolic Enzyme/Protease		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

H₂O : 125 mg/mL (1357.07 mM; Need ultrasonic)

Solvent	Mass	Concentration		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	10.8566 mL	54.2829 mL	108.5658 mL
	5 mM	2.1713 mL	10.8566 mL	21.7132 mL
	10 mM	1.0857 mL	5.4283 mL	10.8566 mL

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

BIOLOGICAL ACTIVITY

Description

DL-Alanine-d₃ is the deuterium 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

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

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