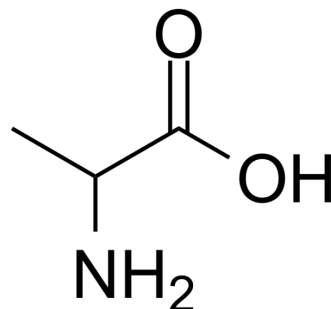


DL-Alanine

Cat. No.:	HY-N2362		
CAS No.:	302-72-7		
Molecular Formula:	C ₃ H ₇ NO ₂		
Molecular Weight:	89.09		
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 : 50 mg/mL (561.23 mM; Need ultrasonic)

DMSO : < 1 mg/mL (ultrasonic;warming;heat to 80°C) (insoluble or slightly soluble)

	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	11.2246 mL	56.1230 mL	112.2460 mL
	5 mM	2.2449 mL	11.2246 mL	22.4492 mL
	10 mM	1.1225 mL	5.6123 mL	11.2246 mL

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

BIOLOGICAL ACTIVITY

Description

DL-alanine, an orally active 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]}

IC₅₀ & Target

Human Endogenous Metabolite

In Vivo

DL-alanine (2500-10000 mg/kg, i.g., daily from 6 to 15 days) has no obvious teratogenicity in SD rats^[7]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

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

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