Product Data Sheet

Product Name: DL-Alanine-13C-1
Cat. No.: GC68214

Chemical Properties

Cas. No.	102029-81-2		
Formula	$C_2{}^{13}CH_7NO_2$	M.Wt	90.09
Solubility	H_2O : 50 mg/mL (555.00 mM; Need ultrasonic); DMSO : 1 mg/mL (11.10 mM; ultrasonic and warming and heat to 80°C)	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure	DL-Alanine-13C-1		

Background

DL-Alanine-13C-1 (DL-2-Aminopropionic acid-13C-1) 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(11). 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].

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].

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA