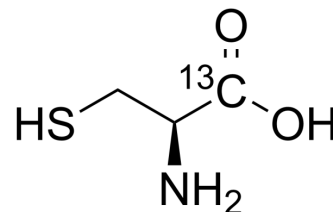


L-Cysteine-1-¹³C

Cat. No.:	HY-Y0337S3
CAS No.:	224054-24-4
Molecular Formula:	C ₂ ¹³ CH ₇ NO ₂ S
Molecular Weight:	122.15
Target:	Endogenous Metabolite
Pathway:	Metabolic Enzyme/Protease
Storage:	4°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



SOLVENT & SOLUBILITY

In Vitro

H₂O : 5 mg/mL (40.93 mM; ultrasonic and warming and heat to 60°C)

	Solvent Concentration	Mass	1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM		8.1867 mL	40.9333 mL	81.8666 mL
	5 mM		1.6373 mL	8.1867 mL	16.3733 mL
	10 mM		0.8187 mL	4.0933 mL	8.1867 mL

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

BIOLOGICAL ACTIVITY

Description

L-Cysteine-1-¹³C is the ¹³C-labeled L-Cysteine. L-Cysteine is a conditionally essential amino acid, which acts as a precursor for biologically active molecules such as hydrogen sulphide (H₂S), glutathione and taurine. L-Cysteine suppresses ghrelin and reduces appetite in rodents and humans^[1].

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.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA