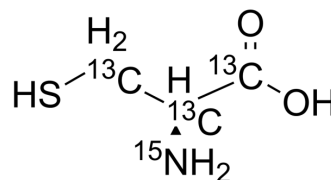


L-Cysteine-¹³C₃, ¹⁵N

Cat. No.:	HY-Y0337S
CAS No.:	202406-97-1
Molecular Formula:	¹³ C ₃ H ₇ ¹⁵ N O ₂ S
Molecular Weight:	125.13
Target:	Endogenous Metabolite
Pathway:	Metabolic Enzyme/Protease
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

H₂O : 2.5 mg/mL (19.98 mM; ultrasonic and warming and heat to 60°C)
 DMSO : < 1 mg/mL (ultrasonic;warming;heat to 60°C) (insoluble or slightly soluble)

Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg
		Concentration	1 mg	5 mg	10 mg
	1 mM		7.9917 mL	39.9584 mL	79.9169 mL
	5 mM		1.5983 mL	7.9917 mL	15.9834 mL
	10 mM		0.7992 mL	3.9958 mL	7.9917 mL

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

BIOLOGICAL ACTIVITY

Description

L-Cysteine-¹³C₃, ¹⁵N is the ¹³C- and ¹⁵N-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