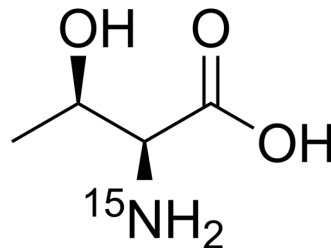


L-Threonine-¹⁵N

Cat. No.:	HY-N0658S
CAS No.:	80681-09-0
Molecular Formula:	C ₄ H ₉ ¹⁵ NO ₃
Molecular Weight:	120.11
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 : 33.33 mg/mL (277.50 mM; Need ultrasonic)
H₂O : 33.33 mg/mL (277.50 mM; Need ultrasonic)

	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	8.3257 mL	41.6285 mL	83.2570 mL
	5 mM	1.6651 mL	8.3257 mL	16.6514 mL
	10 mM	0.8326 mL	4.1629 mL	8.3257 mL

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

BIOLOGICAL ACTIVITY

Description

L-Threonine-¹⁵N is the ¹⁵N-labeled L-Threonine. L-Threonine is a natural amino acid, can be produced by microbial fermentation, and is used in food, medicine, or feed[1][2].

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.

[2]. Zhao H, et al. Increasing L-threonine production in *Escherichia coli* by engineering the glyoxylate shunt and the L-threonine biosynthesis pathway. *Appl Microbiol Biotechnol.* 2018 Jul;102(13):5505-5518.

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

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