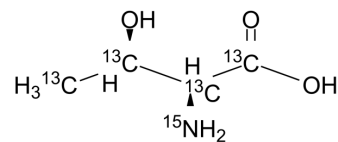


## L-Threonine-<sup>13</sup>C<sub>4</sub>,<sup>15</sup>N

<b>Cat. No.:</b>	HY-N0658S3		
<b>CAS No.:</b>	202468-39-1		
<b>Molecular Formula:</b>	<sup>13</sup> C <sub>4</sub> H <sub>9</sub> <sup>15</sup> NO <sub>3</sub>		
<b>Molecular Weight:</b>	124.08		
<b>Target:</b>	Endogenous Metabolite		
<b>Pathway:</b>	Metabolic Enzyme/Protease		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

H<sub>2</sub>O : 33.33 mg/mL (268.62 mM; Need ultrasonic and warming)

Solvent	Mass	Concentration		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	8.0593 mL	40.2966 mL	80.5932 mL
	5 mM	1.6119 mL	8.0593 mL	16.1186 mL
	10 mM	0.8059 mL	4.0297 mL	8.0593 mL

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

### BIOLOGICAL ACTIVITY

#### Description

L-Threonine-<sup>13</sup>C<sub>4</sub>,<sup>15</sup>N is the <sup>13</sup>C- and <sup>15</sup>N-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].

#### 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<sup>[1]</sup>.

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.

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

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