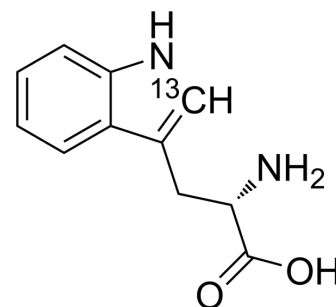


## L-Tryptophan-<sup>13</sup>C

<b>Cat. No.:</b>	HY-N0623S1
<b>CAS No.:</b>	115709-68-7
<b>Molecular Formula:</b>	C <sub>10</sub> <sup>13</sup> CH <sub>12</sub> N <sub>2</sub> O <sub>2</sub>
<b>Molecular Weight:</b>	205.22
<b>Target:</b>	Endogenous Metabolite
<b>Pathway:</b>	Metabolic Enzyme/Protease
<b>Storage:</b>	4°C, protect from light, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light, stored under nitrogen)



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 5 mg/mL (24.36 mM; ultrasonic and warming and heat to 60°C)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	4.8728 mL	24.3641 mL	48.7282 mL
	5 mM	0.9746 mL	4.8728 mL	9.7456 mL
	10 mM	0.4873 mL	2.4364 mL	4.8728 mL

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

### BIOLOGICAL ACTIVITY

#### Description

L-Tryptophan-<sup>13</sup>C is the <sup>13</sup>C-labeled L-Tryptophan. L-Tryptophan (Tryptophan) is an essential amino acid that is the precursor of serotonin, melatonin, and vitamin B3[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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