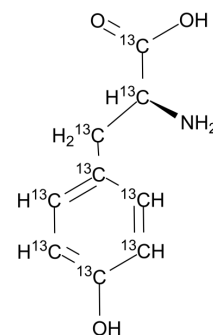


## L-Tyrosine-<sup>13</sup>C<sub>9</sub>

<b>Cat. No.:</b>	HY-N0473S3		
<b>CAS No.:</b>	55443-60-2		
<b>Molecular Formula:</b>	<sup>13</sup> C <sub>9</sub> H <sub>11</sub> NO <sub>3</sub>		
<b>Molecular Weight:</b>	190.12		
<b>Target:</b>	Endogenous Metabolite; Isotope-Labeled Compounds		
<b>Pathway:</b>	Metabolic Enzyme/Protease; Others		
<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

DMSO : 66.67 mg/mL (350.67 mM; ultrasonic and adjust pH to 10 with 1M NaOH)

H<sub>2</sub>O : 4.85 mg/mL (25.51 mM; ultrasonic and warming and adjust pH to 9 with NaOH and heat to 60°C)

Preparing Stock Solutions	Solvent		1 mg	5 mg	10 mg
	Concentration	Mass			
	1 mM		5.2598 mL	26.2992 mL	52.5984 mL
	5 mM		1.0520 mL	5.2598 mL	10.5197 mL
	10 mM		0.5260 mL	2.6299 mL	5.2598 mL

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

### BIOLOGICAL ACTIVITY

#### Description

L-Tyrosine-<sup>13</sup>C<sub>9</sub> is the <sup>13</sup>C-labeled L-Tyrosine. L-Tyrosine is a non-essential amino acid which can inhibit citrate synthase activity in the posterior cortex.

#### 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.

---

**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](mailto:tech@MedChemExpress.com)

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