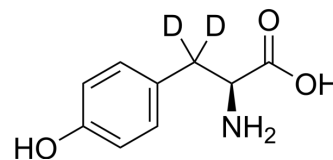


## L-Tyrosine-d<sub>2</sub>

<b>Cat. No.:</b>	HY-N0473S8
<b>CAS No.:</b>	72963-27-0
<b>Molecular Formula:</b>	C <sub>9</sub> H <sub>9</sub> D <sub>2</sub> NO <sub>3</sub>
<b>Molecular Weight:</b>	183.2
<b>Target:</b>	Endogenous Metabolite
<b>Pathway:</b>	Metabolic Enzyme/Protease
<b>Storage:</b>	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

1M HCl : 50 mg/mL (272.93 mM; Need ultrasonic)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	5.4585 mL	27.2926 mL	54.5852 mL
5 mM	1.0917 mL	5.4585 mL	10.9170 mL
10 mM	0.5459 mL	2.7293 mL	5.4585 mL

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

### BIOLOGICAL ACTIVITY

#### Description

L-Tyrosine-d<sub>2</sub> is the deuterium 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.

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

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