L-Tyrosine-d_3

Cat. No.: HY-N0473S15

CAS No.: 71939-39-4

Molecular Formula: $C_9H_8D_3NO_3$

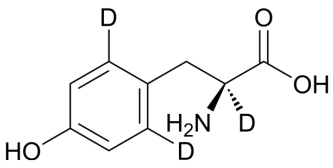
Molecular Weight: 184.21

Target: Endogenous Metabolite

Pathway: Metabolic Enzyme/Protease

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

1M HCl : 12.5 mg/mL (67.86 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	5.4286 mL	27.1429 mL	54.2859 mL
	5 mM	1.0857 mL	5.4286 mL	10.8572 mL
	10 mM	0.5429 mL	2.7143 mL	5.4286 mL

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

BIOLOGICAL ACTIVITY

Description

L-Tyrosine-d_3 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[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Ferreira GK, et al. Effect of L-tyrosine in vitro and in vivo on energy metabolism parameters in brain and liver of young rats. Neurotox Res. 2013 May;23(4):327-35.

[2]. 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.

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