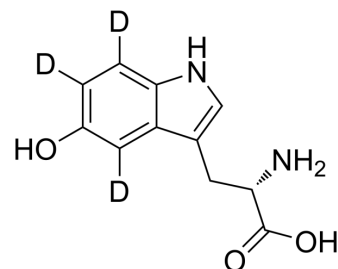


L-5-Hydroxytryptophan-d₃

Cat. No.:	HY-B1716S		
CAS No.:	1276197-29-5		
Molecular Formula:	C ₁₁ H ₉ D ₃ N ₂ O ₃		
Molecular Weight:	223.24		
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

DMSO : 12.5 mg/mL (55.99 mM; ultrasonic and warming and heat to 60°C)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	4.4795 mL	22.3974 mL	44.7948 mL
5 mM	0.8959 mL	4.4795 mL	8.9590 mL
10 mM	0.4479 mL	2.2397 mL	4.4795 mL

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

BIOLOGICAL ACTIVITY

Description

L-5-Hydroxytryptophan-d₃ is the deuterium labeled L-5-Hydroxytryptophan. L-5-Hydroxytryptophan (L-5-HTP), a naturally occurring amino acid and a dietary supplement for use as an antidepressant, appetite suppressant, and sleep aid, is the immediate precursor of the neurotransmitter serotonin and a reserpine antagonist[1]. L-5-Hydroxytryptophan (L-5-HTP) is used to treat fibromyalgia, myoclonus, migraine, and cerebellar ataxia[2][3][4][5].

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

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- [3]. Caruso I, et al. Double-blind study of 5-hydroxytryptophan versus placebo in the treatment of primary fibromyalgia syndrome. *J Int Med Res.* 1990 May-Jun;18(3):201-9.
- [4]. Thal LJ, et al. Treatment of myoclonus with L-5-hydroxytryptophan and carbidopa: clinical, electrophysiological, and biochemical observations. *Ann Neurol.* 1980 Jun;7(6):570-6.
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Caution: Product has not been fully validated for medical applications. For research use only.

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