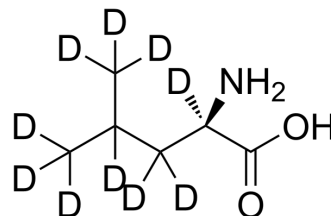


## D-Leucine-d<sub>10</sub>

<b>Cat. No.:</b>	HY-Y0378S		
<b>CAS No.:</b>	271247-12-2		
<b>Molecular Formula:</b>	C <sub>6</sub> H <sub>3</sub> D <sub>10</sub> NO <sub>2</sub>		
<b>Molecular Weight:</b>	141.23		
<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



### BIOLOGICAL ACTIVITY

<b>Description</b>	D-Leucine-d <sub>10</sub> is the deuterium labeled D-Leucine. D-Leucine is a more potent anti-seizure agent than L-leucine. D-leucine potently terminates seizures even after the onset of seizure activity. D-leucine, but not L-leucine, reduces long-term potentiation but had no effect on basal synaptic transmission in vitro <sup>[1]</sup> .
<b>In Vitro</b>	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.
- [2]. Xiaoyu Cao, et al. Combination of PARP Inhibitor and Temozolomide to Suppress Chordoma Progression. *J Mol Med (Berl).* 2019 Aug;97(8):1183-1193

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

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