Product Data Sheet

D-Leucine-d₁₀

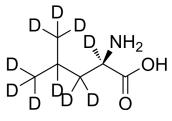
Cat. No.: HY-Y0378S CAS No.: 271247-12-2 Molecular Formula: $C_6H_3D_{10}NO_2$ Molecular Weight: 141.23

Target: Endogenous Metabolite; Isotope-Labeled Compounds

Pathway: Metabolic Enzyme/Protease; Others

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.



BIOLOGICAL ACTIVITY

Description	D-Leucine- d_{10} 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[1].
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]. 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.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

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