

Product Data Sheet

DL-Isoleucine-d₁₀

Cat. No.:HY-N0771S1CAS No.:29909-02-2Molecular 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	DL-Isoleucine- d_{10} is the deuterium labeled L-Isoleucine. L-isoleucine is a nonpolar hydrophobic amino acid[1]. L-Isoleucine is an essential amino acid.
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]. Arkhipov SG, et al. New hydrophobic L-amino acid salts: maleates of L-leucine, L-isoleucine and L-norvaline. Acta Crystallogr C Struct Chem. 2015 Jul;71(Pt 7):584-92.

[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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