Proteins

Isovaleric acid-13C₂

Cat. No.: HY-W012980S4 Molecular Formula: $C_3^{13}C_2H_{10}O_2$

Molecular Weight: 104.12

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.

Product Data Sheet

BIOLOGICAL ACTIVITY

Description	Isovaleric acid- 13 C ₂ is 13 C labeled Gamma-decalactone (HY-N7105). Gamma-decalactone, γ -decalactone is used as an essential food additive with a ruity peach flavor ^[1] . Ricinoleic acid (12-hydroxy-octadec-9-enoic acid) is used as the substrate in most production processes of γ -decalactone ^[2] .
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]. Ackman RG, et al. Birthweights in the Faroe Islands: possible role of isovaleric acid. J Intern Med. 1989 Feb;225(2):73-5.

[2]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019 Feb;53(2):211-216.

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

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