
Product Data Sheet

Product Name: L-Isoleucine-d10

Cat. No.: GC68395

Chemical Properties

Cas. No. 35045-71-7

Formula $C_6H_3D_{10}NO_2$

M.Wt 141.23

Solubility H_2O : 8.33 mg/mL (58.98 mM; Need ultrasonic)

Storage Store at $-20^{\circ}C$

General tips For obtaining a higher solubility , please warm the tube at $37^{\circ}C$ and shake it in the ultrasonic bath for a while. Stock solution can be stored below $-20^{\circ}C$ for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure

Background

L-Isoleucine-d10 is the deuterium labeled L-Isoleucine. L-isoleucine is a nonpolar hydrophobic amino acid^[1]. L-Isoleucine is an essential amino acid.

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].

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

[2]. 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.

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

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