Product Data Sheet

L-Histidine-13C6,15N3

 Cat. No.:
 HY-N0832S1

 CAS No.:
 741656-40-6

 Molecular Formula:
 $^{13}C_6H_9^{15}N_3O_2$

Molecular Weight:

Target: Isotope-Labeled Compounds; Mitochondrial Metabolism; Endogenous Metabolite

Pathway: Others; Metabolic Enzyme/Protease

164.09

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

Analysis.

BIOLOGICAL ACTIVITY

Description	L-Histidine- 13 C ₆ , 15 N ₃ is 13 C and 15 N-labeled L-Histidine (HY-N0832). L-Histidine is an essential amino acid for infants. L-Histidine is an inhibitor of mitochondrial glutamine transport.
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 Feb;53(2):211-216.

[2]. Bou Zeidan M, et al. L-histidine inhibits biofilm formation and FLO11-associated phenotypes in Saccharomyces cerevisiae flor yeasts. PLoS One. 2014 Nov 4;9(11):e112141.

[3]. Rama Rao KV, et al. Brain edema in acute liver failure: inhibition by L-histidine. Am J Pathol. 2010 Mar;176(3):1400-8.

[4]. Yoshikawa T, et al. Insufficient intake of L-histidine reduces brain histamine and causes anxiety-like behaviors in male mice. J Nutr. 2014 Oct;144(10):1637-41.

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

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