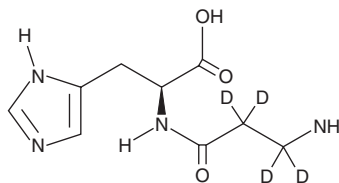


PRODUCT INFORMATION



L-Carnosine-d₄ Item No. 26781

CAS Registry No.: 2714339-90-7
Formal Name: (3-aminopropanoyl-2,2,3,3-d₄)-L-histidine
Synonym: β-Alanyl-L-histidine-d₄
MF: C₉H₁₀D₄N₄O₃
FW: 230.3
Chemical Purity: ≥98% (L-Carnosine)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₄); ≤1% d₀
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

L-Carnosine-d₄ is intended for use as an internal standard for the quantification of L-carnosine by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

Description

L-Carnosine is an antioxidant.^{1,2} It scavenges singlet oxygen *in vitro* when used at concentrations ranging from 1.5 to 15 mM.¹ *In vivo*, L-carnosine decreases plasma malondialdehyde (MDA) levels and lipid peroxidation and increases serum levels of nitric oxide (NO) in nephrectomized rats.²

References

- Hartman, P.E., Hartman, Z., and Ault, K.T. Scavenging of singlet molecular oxygen by imidazole compounds: High and sustained activities of carboxy terminal histidine dipeptides and exceptional activity of imidazole-4-acetic acid. *Photochem. Photobiol.* **51(1)**, 59-66 (1990).
- Yapıslar, H. and Taskin, E. L-carnosine alters some hemorheologic and lipid peroxidation parameters in nephrectomized rats. *Med. Sci. Monit.* **20**, 399-405 (2014).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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