

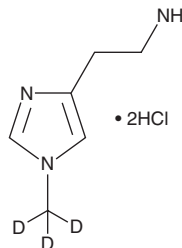
PRODUCT INFORMATION



1-Methylhistamine-d₃ (hydrochloride)

Item No. 43797

CAS Registry No.: 344299-49-6
Formal Name: 1-(methyl-d₃)-1H-imidazole-4-ethanamine, dihydrochloride
Synonyms: N¹-Methylhistamine-d₃, Ntau-Methylhistamine-d₃, tele-Methylhistamine-d₃
MF: C₆H₈D₃N₃ • 2HCl
FW: 201.1
Chemical Purity: ≥98% (1-Methylhistamine)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₃); ≤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

1-Methylhistamine-d₃ (hydrochloride) is intended for use as an internal standard for the quantification of 1-methylhistamine (Item No. 19516) 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).

1-Methylhistamine-d₃ (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the 1-methylhistamine-d₃ (hydrochloride) in the solvent of choice, which should be purged with an inert gas. 1-Methylhistamine-d₃ (hydrochloride) is soluble in ethanol and DMSO.

Description

1-Methylhistamine is a major metabolite of histamine by histamine N-methyltransferase in the pathway of histidine metabolism.¹ It has been used as a biomarker of brain histaminergic system activity via cerebrospinal fluid (CSF) levels in Alzheimer's disease patients, as well as those with hypersomnia or other neurological conditions.^{2,3}

References

1. Lindell, S.E. and Schayer, R.W. Metabolism of injected [¹⁴C] histamine in the kidney of the dog. *Br. J. Pharmacol. Chemother.* **13**(1), 52-53 (1958).
2. Motawaj, M., Peoc'h, K., Callebert, J., *et al.* CSF levels of the histamine metabolite tele-methylhistamine are only slightly decreased in Alzheimer's disease. *J. Alzheimers Dis.* **22**(3), 861-871 (2010).
3. Dauvilliers, Y., Delallée, N., Jausse, I., *et al.* Normal cerebrospinal fluid histamine and tele-methylhistamine levels in hypersomnia conditions. *Sleep* **35**(10), 1359-1366 (2016).

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.

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