

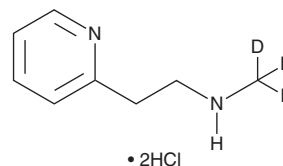
PRODUCT INFORMATION



Betahistine-d₃ (hydrochloride)

Item No. 35559

CAS Registry No.: 244094-72-2
Formal Name: N-(methyl-d₃)-2-pyridineethanamine, dihydrochloride
MF: C₈H₉D₃N₂ • 2HCl
FW: 212.1
Chemical Purity: ≥90% (Betahistine)
Deuterium
Incorporation: ≥99% deuterated forms (d₁-d₃); ≤1% d₀
UV/Vis.: λ_{max}: 261, 267 nm
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

Betahistine-d₃ (hydrochloride) is intended for use as an internal standard for the quantification of betahistine (Item No. 27602) 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).

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

Description

Betahistine is a histamine H₃ receptor antagonist and histamine H₁ receptor agonist.¹ *In vivo*, betahistine dilates pre-capillary arterioles and increases blood flow to the stria vascularis in guinea pigs.^{2,3} Betahistine (8 mg/kg) reduces weight gain and increased feeding behavior induced by olanzapine (Item No. 11937) in female rats.⁴ Formulations containing betahistine have been used in the treatment of balance disorders and vertigo symptoms associated with Meniere's disease.

References

1. Timmerman, H. Histamine agonists and antagonists. *Acta Otolaryngol. Suppl.* **479**, 5-11 (1991).
2. Bertlich, M., Ihler, F., Sharaf, K., *et al.* Betahistine metabolites, aminoethylpyridine, and hydroxyethylpyridine increase cochlear blood flow in guinea pigs *in vivo*. *Int. J. Audiol.* **53**(10), 753-759 (2014).
3. De Wilde, L., Roels, K., Polet, M., *et al.* Identification and confirmation of diuretics and masking agents in urine by turbulent flow online solid-phase extraction coupled with liquid chromatography-triple quadrupole mass spectrometry for doping control. *J. Chromatogr. A.* **1579**, 31-40 (2018).
4. Lian, J., Huang, X.-F., Pai, N., *et al.* Ameliorating antipsychotic-induced weight gain by betahistine: Mechanisms and clinical implications. *Pharmacol. Res.* **106**, 51-63 (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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