

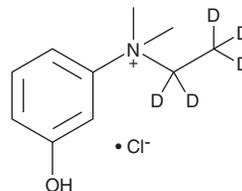
PRODUCT INFORMATION



Edrophonium-d₅ (chloride)

Item No. 43808

Formal Name: N-(ethyl-d₅)-3-hydroxy-N,N-dimethylbenzenaminium, monochloride
MF: C₁₀H₁₁D₅NO • Cl
FW: 206.7
Chemical Purity: ≥98% (Edrophonium)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₅); ≤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

Edrophonium-d₅ (chloride) is intended for use as an internal standard for the quantification of edrophonium (Item No. 15928) 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).

Edrophonium-d₅ (chloride) is supplied as a solid. A stock solution may be made by dissolving the edrophonium-d₅ (chloride) in the solvent of choice, which should be purged with an inert gas. Edrophonium-d₅ (chloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of edrophonium-d₅ (chloride) in DMF is approximately 500 µg/ml and in ethanol and DMSO is approximately 10 in 2 mg/ml, respectively.

Description

Edrophonium is an inhibitor of acetylcholinesterase (AChE; K_is = 200, 200, and 400 nM for the human, bovine, and octopus enzymes, respectively).¹ It induces repetitive action potentials in voltage-stimulated cat gastrocnemius plantaris muscles when intra-arterially administered at a dose of 10 µg/animal.² Formulations containing edrophonium have previously been used in tests for diagnosing myasthenia gravis.

References

- Boyle, N.A., Talesa, V., Giovannini, E., *et al.* Synthesis and study of thiocarbonate derivatives of choline as potential inhibitors of acetylcholinesterase. *J. Med. Chem.* **40**(19), 3009-3013 (1997).
- Blaber, L.C. and Bowman, W.C. The effects of some drugs on the repetitive discharges produced in nerve and muscle by anticholinesterases. *Int. J. Neuropharmacol.* **2**(1-2), 1-16 (1963).

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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