

Product Data Sheet

Product Name: (-)-Hyoscyamine-d3

Cat. No.: GC46246

Chemical Properties

Cas. No. N/A

SMILES O=C([C@H](CO)C1=CC=CC=C1)O[C@H]2C[C@H]3CC[C@H](N3C([2H])([2H])[2H])C2

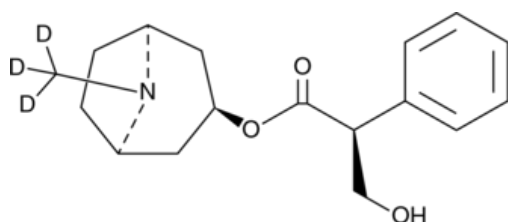
Formula C₁₇H₂₀D₃NO₃ M.Wt 292.4

Solubility Chloroform: 50 mg/ml, Ethanol: Storage Store at -20°C
soluble, Methanol: soluble

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.

Structure



Background

(-)-Hyoscyamine-d₃ is intended for use as an internal standard for the quantification of (-)-hyoscyamine by GC- or LC-MS. (-)-Hyoscyamine is a tropane alkaloid, a muscarinic receptor antagonist, and an isomer of atropine.^{1,2} (-)-Hyoscyamine inhibits the arterial depressor response induced by the muscarinic agonist methacholine in dogs.¹ It is more effective than atropine at inhibiting EEG arousal in dogs following sciatic nerve stimulation when administered at doses of 0.5 and 1 mg/kg. (-)-Hyoscyamine induces convulsions in and is toxic to mice (LD₅₀ = 95 mg/kg).²

1. Domino, E.F., and Hudson, R.D. Observations on the pharmacological actions of the isomers of atropine. *J. Pharmacol. Exp. Ther.* 127(4):305-312 (1959).
2. Authority, E.F.S. Scientific Opinion on Tropane alkaloids in food and feed EFSA Panel on contaminants in the food chain (CONTAM) EFSA

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

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