

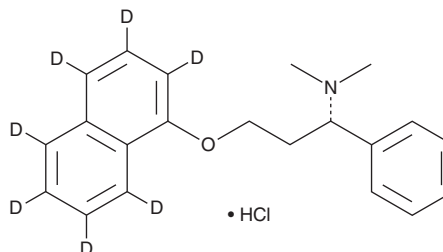
PRODUCT INFORMATION



Dapoxetine-d₇ (hydrochloride)

Item No. 40762

CAS Registry No.: 2699607-47-9
Formal Name: N,N-dimethyl-α3-[2-(1-naphthalenyloxy)ethyl-d₇]-benzenemethanamine, monohydrochloride
Synonym: (S)-(+)-Dapoxetine-d₇
MF: C₂₁H₁₆D₇NO • HCl
FW: 348.9
Chemical Purity: ≥95% (Dapoxetine)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₇); ≤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

Dapoxetine-d₇ (hydrochloride) is intended for use as an internal standard for the quantification of dapoxetine 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).

Dapoxetine-d₇ (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the dapoxetine-d₇ (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Dapoxetine-d₇ (hydrochloride) is soluble in ethanol, methanol, and DMSO.

Description

Dapoxetine is a selective serotonin (5-HT) reuptake inhibitor (SSRI; IC₅₀ = 10 nM in isolated rat cerebral cortex membranes).¹ It selectively inhibits 5-HT uptake over norepinephrine or dopamine uptake in cells expressing the human transporters (IC₅₀s = 1.2, 202, and 1,720 nM, respectively).² Dapoxetine (1 and 80 µg/animal) increases the amplitude of the pudendal motoneuron reflex discharges in a rat model of the ejaculatory expulsion reflex induced by electrical stimulation of the dorsal penis nerves.³ It decreases infarct volume and improves motor performance in a rat model of ischemic stroke induced by bilateral common carotid artery occlusion when administered at doses of 30 or 60 mg/kg.⁴ Dapoxetine (5 mg/kg) decreases prostate weight and levels of Tnf-α, inducible nitric oxide synthase (iNos), and Cox-2 in a rat model of testosterone propionate-induced benign prostatic hyperplasia (BPH).⁵ Formulations containing dapoxetine have been used in the treatment of premature ejaculation.

References

- Robertson, D.W., Wong, D.T., and Thompson, D.C. *APBI Holdings LLC*. **US5135947A** (1990).
- Gengo, P.J., François, G., McKenna, K.E., *et al.* *J. Urol.* **173**(4), 239 (2005).
- Clément, P., Bernabé, J., Gengo, P., *et al.* *Eur. Urol.* **51**(3), 825-832 (2007).
- Abdel-Hameed, S.S., El-Daly, M., Ahmed, A.-S.F., *et al.* *Naunyn Schmiedebergs Arch. Pharmacol.* **397**(1), 253-266 (2024).
- Sayed, R.H., Saad, M.A., and El-Sahar, A.E. *Toxicol. Appl. Pharmacol.* **311**, 52-60 (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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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM