

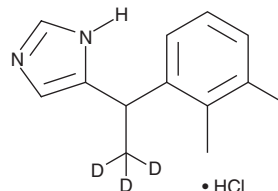
PRODUCT INFORMATION



Medetomidine-d₃ (hydrochloride)

Item No. 41734

CAS Registry No.: 1246820-20-1
Formal Name: 5-[1-(2,3-dimethylphenyl)ethyl-2,2,2-d₃]-1H-imidazole, monohydrochloride
Synonym: MPV 785-d₃
MF: C₁₃H₁₃D₃N₂ • HCl
FW: 239.8
Chemical Purity: ≥98% (Medetomidine)
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.

Description

Medetomidine-d₃ (hydrochloride) (Item No. 41734) is intended for use as an internal standard for the quantification of medetomidine (Item Nos. 38807 | 38582) 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).

Medetomidine is categorized as a sedative.¹ It induces sedation in dogs. Medetomidine has analgesic activity alone and an additive analgesic effect in combination with fentanyl (Item Nos. ISO60197 | 14719 | 23580) or morphine (Item Nos. ISO60147 | 15464) in rats.² It has been found in fentanyl samples seized by law enforcement.³ Formulations containing medetomidine have been used as veterinary sedatives. This product is intended for research and forensic applications.

References

1. Vainio, O. and Vähä-Vahe, T. Reversal of medetomidine sedation by atipamezole in dogs. *J. Vet. Pharmacol. Ther.* **13**(1), 15-22 (1990).
2. Ossipov, M.H., Harris, S., Lloyd, P., *et al.* Antinociceptive interaction between opioids and medetomidine: Systemic additivity and spinal synergy. *Anesthesiology* **73**(6), 1227-1235 (1990).
3. Sisco, E. and Appley, M. Identification of the veterinary sedative medetomidine in combination with opioids and xylazine in Maryland. *J. Forensic Sci.* (2023).

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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