

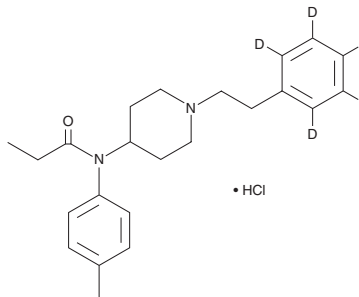
PRODUCT INFORMATION



para-Methylfentanyl-d₅ (hydrochloride) (exempt preparation)

Item No. 43856

Formal Name: N-(1-(phenethyl-d₅)piperidin-4-yl)-N-(p-tolyl)propionamide, monohydrochloride
Synonym: *p*-Methylfentanyl-d₅
MF: C₂₃H₂₅D₅N₂O • HCl
FW: 392.0
Chemical Purity: ≥98% (*para*-Methylfentanyl)
Deuterium
Incorporation: ≥99% deuterated forms (d₁-d₅); ≤1% d₀
Supplied as: A 100 µg/ml solution in methanol
Storage: -20°C
Stability: ≥3 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Description

para-Methylfentanyl-d₅ (hydrochloride) (exempt preparation) (Item No. 43856) is intended for use as an internal standard for the quantification of *para*-methylfentanyl (Item Nos. 20038 | 41384) 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).

para-Methylfentanyl is categorized as an opioid.¹ It has antinociceptive activity.² *para*-Methylfentanyl-d₅ is regulated as a Schedule I compound in the United States. *para*-Methylfentanyl-d₅ (hydrochloride) (exempt preparation) (Item No. 43856) is provided as a DEA exempt preparation. This product is intended for research and forensic applications.

References

1. Hassanien, S.H., Bassman, J.R., Perrien Naccarato, C.M., *et al.* *In vitro* pharmacology of fentanyl analogs at the human mu opioid receptor and their spectroscopic analysis. *Drug Test. Anal.* **12(8)**, 1212-1221 (2020).
2. Casy, A.F. and Huckstep, M.R. Structure-activity studies of fentanyl. *J. Pharm. Pharmacol.* **40(9)**, 605-608 (1988).

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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 05/21/2025

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