

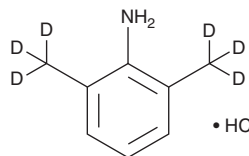
PRODUCT INFORMATION



2,6-Xylidine-d₆ (hydrochloride)

Item No. 38920

CAS Registry No.: 2748480-14-8
Formal Name: 2,6-dimethyl-benzenamine-d₆, monohydrochloride
Synonyms: 2,6-Dimethylaniline-d₆, 2,6-DMA-d₆
MF: C₈H₅D₆N • HCl
FW: 163.7
Chemical Purity: ≥98% (2,6-Xylidine)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₆); ≤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

2,6-Xylidine-d₆ (hydrochloride) (Item No. 38920) is intended for use as an internal standard for the quantification of 2,6-xylidine (Item No. 38856) 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).

2,6-Xylidine is categorized as an anesthetic metabolite.¹⁻³ 2,6-Xylidine is a metabolite of xylazine (Item Nos. 37854 | 22641), lidocaine (Item No. 20081), and bupivacaine (Item No. 31718). It is also a precursor in the synthesis of bupivacaine, mepivacaine (Item No. 23402), and ropivacaine.⁴ This product is intended for research and forensic applications.

References

1. Spyrodaki, M.-H., Lyris, E., Georgoulakis, I., *et al.* Determination of xylazine and its metabolites by GC-MS in equine urine for doping analysis. *J. Pharm. Biomed. Anal.* **35**(1), 107-116 (2004).
2. Parker, R.J., Collins, J.M., and Strong, J.M. Identification of 2,6-xylidine as a major lidocaine metabolite in human liver slices. *Drug Metab. Dispos.* **24**(11), 1167-1173 (1996).
3. Rydevik, A., Bondesson, U., and Hedeland, M. Structural elucidation of phase I and II metabolites of bupivacaine in horse urine and fungi of the *Cunninghamella* species using liquid chromatography/multi-stage mass spectrometry. *Rapid Commun. Mass Spectrom.* **26**(11), 1338-1346 (2012).
4. Suveges, N.S., de Souza, R.O.M.A., and Gutman, B. Synthesis of mepivacaine and its analogues by a continuous-flow tandem hydrogenation/reductive amination strategy. *Eur. J. Org. Chem.* **44**, 6511-6517 (2017).

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, 03/10/2025

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