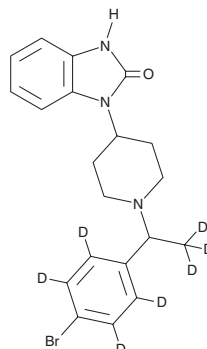


PRODUCT INFORMATION



Brorphine-d₇ Item No. 31566

CAS Registry No.: 2831715-45-6
Formal Name: 1-[1-[1-(4-bromophenyl)-2,3,5,6-d₄]ethyl-2,2,2-d₃]-4-piperidiny]-1,3-dihydro-2H-benzimidazol-2-one
MF: C₂₀H₁₅D₇BrN₃O
FW: 407.4
Chemical Purity: ≥98% (Brorphine)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₇); ≤1% d₀
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥5 years



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

Description

Brorphine-d₇ (Item No. 31566) is intended for use as an internal standard for the quantification of brorphine (Item Nos. 34184 | 27816) 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).

Brorphine is categorized as an opioid.^{1,2} It induces respiratory depression in mice.² Brorphine-d₇ is regulated as a Schedule I compound in the United States. This product is intended for research and forensic applications.

Reference

- Kennedy, N.M., Schmid, C.L., Ross, N.C., *et al.* Optimization of a series of mu opioid receptor (MOR) agonists with high G protein signaling bias. *J. Med. Chem.* **61**(19), 8895-8907 (2018).
- Vandeputte, M.M., Bilel, S., Tirri, M., *et al.* Elucidating the harm potential of brorphine analogues as new synthetic opioids: Synthesis, *in vitro*, and *in vivo* characterization. *Neuropharmacology* **260**, 110113 (2024).

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.

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