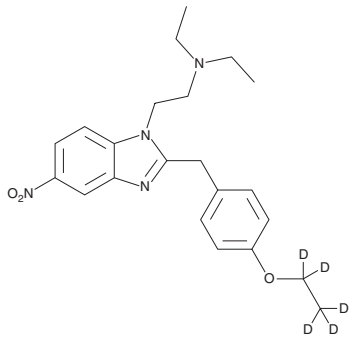
PRODUCT INFORMATION

Etonitazene-d_5 (exempt preparation)

Item No. 43515

Formal Name:	2-[(4-ethoxy-d_5-phenyl)methyl]-N,N-diethyl-5-nitro-1H-benzimidazole-1-ethanamine
MF:	$C_{22}H_{23}D_5N_4O_3$
FW:	401.5
Chemical Purity:	≥98% (Etonitazene)
Deuterium Incorporation:	≥99% deuterated forms (d_1-d_5); ≤1% d_0
UV/Vis.:	λ_{max}: 232 nm
Supplied as:	A 1 mg/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

Etonitazene-d_5 (exempt preparation) (Item No. 43515) is intended for use as an internal standard for the quantification of etonitazene (Item No. 21824) 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).

Etonitazene is categorized as an opioid.[1-3] Etonitazene has analgesic effects in mice.[4] Etonitazene-d_5 is regulated as a Schedule I compound in the United States. Etonitazene-d_5 (exempt preparation) (Item No. 43515) is provided as a DEA exempt prepration. This product is intended for research and forensic applications.

References

1. Blanckaert, P., Cannaert, A., Van Uytfanghe, K., *et al.* Report on a novel emerging class of highly potent benzimidazole NPS opioids: Chemical and *in vitro* functional characterization of isotonitazene. *Drug Test Anal.* **12(4),** 422-430 (2019)
2. Moolten, M.S., Fishman, J.B., Chen, J.C., *et al.* Etonitazene: An opioid selective for the mu receptor types. *Life Sci.* **52(18)**, PL199-PL203 (1993).
3. Vandeputte, M.M., Van Uytfanghe, K., Layle, N.K., *et al.* Synthesis, chemical characterization, and μ-opioid receptor activity assessment of the emerging group of "nitazene" 2-benzylbenzimidazole synthetic opioids. *ACS Chem. Neurosci.* **12(7)**, 1241-1251 (2021).
4. Ujváry, I., Christie, R., Evans-Brown, M., *et al.* DARK classics in chemical neuroscience: Etonitazene and related benzimidazoles. *ACS Chem. Neurosci.* **12(7)**, 1072-1092 (2021).

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