

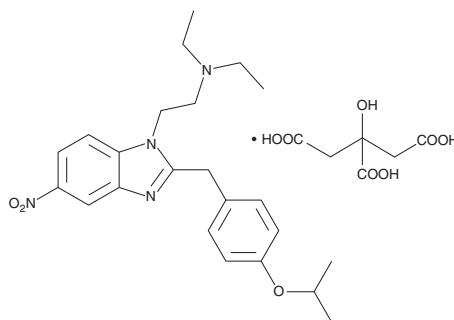
PRODUCT INFORMATION



Isotonitazene (citrate)

Item No. 40425

Formal Name: N,N-diethyl-2-[[4-(1-methylethoxy)phenyl]methyl]-5-nitro-1H-benzimidazole-1-ethanamine, 2-hydroxypropane-1,2,3-tricarboxylic acid
MF: $C_{23}H_{30}N_4O_3 \cdot C_6H_8O_7$
FW: 602.6
Purity: $\geq 98\%$
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

Isotonitazene (citrate) (Item No. 40425) is an analytical reference standard categorized as an opioid.¹⁻³ Isotonitazene has analgesic effects in mice.⁴ It has been associated with overdoses.⁵ Isotonitazene is regulated as a Schedule I compound in the United States. This product is intended for research and forensic applications.

Reference

1. Casy, A.F. and Wright, J. Ionisation constants and partition coefficients of some analgesically active 2-benzylbenzimidazole derivatives and related compounds. *J. Pharm. Pharmacol.* **18(10)**, 677-683 (1966).
2. Blanckaert, P., Cannaert, A., Van Uytvanghe, 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).
3. Vandeputte, M.M., Van Uytvanghe, 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).
5. Shover, C.L., Falasinnu, T.O., Freedman, R.B., *et al.* Emerging characteristics of isotonitazene-involved overdose deaths: A case-control study. *J. Addict. Med.* **15(5)**, 429-431 (2021).

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.

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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