

Emerging Designer Drug Monograph

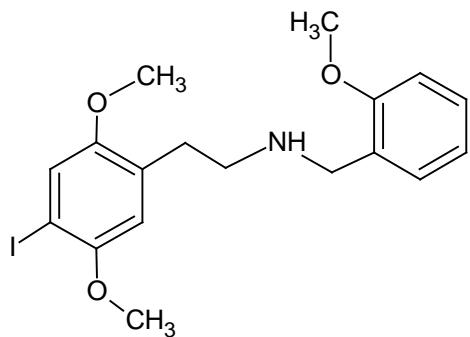
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Drug Name: 25I-NBOMe

Synonyms: 4-iodo-2,5-dimethoxy-N[(2-methoxyphenyl) methyl]-benzenethanamine monohydrochloride, 2C-I-NBOMe, 25-I, Liquid acid, N-Bomb, Smiles

Structure:



Formula: C₁₈H₂₂NO₃I

Molecular Weight: 427.3 g/mol

Pharmacological Drug Class: Hallucinogen, 5-HT2A receptor agonist, N-methoxybenzyl-substituted phenethylamine. (1).

Metabolism: The parent compound undergoes O-demethylation or N-acetylation of the aromatic ring followed by glucuronidation or sulfation. Phase II metabolites can be detected in the urine. Another metabolic pathway involves the deamination of 25I-NBOMe to the corresponding aldehyde followed by oxidation to the corresponding acid or reduction to the corresponding alcohol. (2).

Blood Concentrations: There is little information on blood concentrations. A case report outlined by Rose et al. (2013) reported a serum concentration of 0.76 ng/ml upon hospital admission (3). Serum concentrations of severely intoxicated individuals range from 0.25 ng/mL to 2.78ng/mL (4).

Effects and Toxicity: User reports indicate 25I-NBOMe can be insufflated as a liquid or powder, swallowed, and taken orally (see www.erowid.org). Reports suggest some stimulant effects, resulting in hypertension, tachycardia, agitation, and aggression. Overdose effects including seizure and acute kidney injury (1,3).

Analysis: This is a simple basic drug that chromatographs well by both GC-MS and LC-MS. GC-MS parameters and sample chromatographs can be found in the SWGDRUG Monographs. Plasma 25I-NBOMe has been identified through LC-MS/MS (1). Analysis of 25I-BNOMe metabolites in urine have been analysed through HPLC (4,5).

References:

1. Hill, S. L., Doris, T., Gurung, S., Katebe, S., Lomas, A., Dunn, M., Blain, P., Thomas, S. H. (2013) Severe clinical toxicology associated with analytically confirmed recreational use of 25-I-NBOMe: case series. *Clinical Toxicology (Phila)*, 51(6), 487 - 492.
<http://www.ncbi.nlm.nih.gov/pubmed/?term=thomas+25I-NBOMe>
2. Meyer, M. R., Maurer, H. H. (2010) Metabolism of designer drugs of abuse: an updated review. *Current Drug Metabolism*, 11(5), 468 - 482. <http://www.ncbi.nlm.nih.gov/pubmed/20540700>
3. Rose, S. R., Poklis, J. L., Poklis, A. (2013) A case of 25I-NBOMe (25-I) intoxication: a new potent 5-HT2A agonist designer drug. *Clinical Toxicology (Phila)*, 51(3), 174 - 177.
<http://www.ncbi.nlm.nih.gov/pubmed/23473462>
4. Poklis, J. L., Charles, J., Wolf, C. E., Poklis, A. (2013) High-performance liquid chromatography tandem mass spectrometry method for the determination of 2CC-NBOMe and 25I-NBOMe in human serum. *Biomedical Chromatography*. [Epub ahead of print]
<http://www.ncbi.nlm.nih.gov/pubmed/23893863>
5. Stellpflug, S. J., Kealey, S. E., Hegarty, C. B., Janis, G. C. (2013) 2-(4-Iodo-2,5-dimethoxyphenyl)-N-[(2-methoxyphenyl)methyl]ethanamine (25I-NBOMe): Clinical case with unique confirmatory testing. *Journal of Medical Toxicology*. [Epub ahead of print]
<http://www.ncbi.nlm.nih.gov/pubmed/23872917>

Cayman Chemical

<https://www.caymanchem.com/pdfs/9001128.pdf>

Forendex

<http://forendex.southernforensic.org/index.php/detail/index/1145>

SWGDRUG Monograph

<http://www.swgdrug.org/Monographs/25I-NBOMe.pdf>

25I-NBOMe Erowid

http://www.erowid.org/chemicals/2ci_nbome/2ci_nbome_effects.shtml