

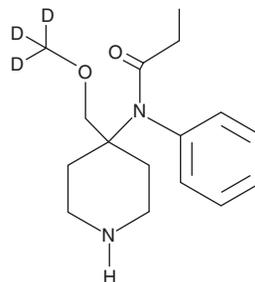
PRODUCT INFORMATION



Norsufentanil-d₃

Item No. 9001143

CAS Registry No.: 1204688-16-3
Formal Name: N-[4-(methoxy-d₃-methyl)-4-piperidinyl]-N-phenyl-propanamide
Synonym: R 30451-d₃
MF: C₁₆H₂₁D₃N₂O₂
FW: 279.4
Chemical Purity: ≥95% (Norsufentanil)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₃); ≤1% d₀
Supplied as: A solution in methyl acetate
Storage: -20°C
Stability: ≥4 years



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

Description

Norsufentanil-d₃ (Item No. 9001143) is intended for use as an internal standard for the quantification of norsufentanil 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).

Sufentanil is a powerful synthetic opioid analgesic that is used in anesthesia and palliative care.¹⁻³ Norsufentanil is a metabolite of sufentanil, produced by oxidative N-dealkylation in the liver by cytochrome P450 isoforms.⁴ The physiological and toxicological properties of this compound are unknown. This product is intended for forensic applications.

References

1. Bovill, J.G., Sebel, P.S., and Stanley, T.H. Opioid analgesics in anesthesia: With special reference to their use in cardiovascular anesthesia. *Anesthesiology* **61(6)**, 731-755 (1984).
2. Hodgson, P.S., Neal, J.M., Pollock, J.E., et al. The neurotoxicity of drugs given intrathecally (spinal). *Anesth. Analg.* **88(4)**, 797-809 (1999).
3. King, S., Forbes, K., Hanks, G.W., et al. A systematic review of the use of opioid medication for those with moderate to severe cancer pain and renal impairment: A European Palliative Care Research Collaborative opioid guidelines project. *Palliat. Med.* **25(5)**, 525-552 (2011).
4. Tateishi, T., Krivoruk, Y., Ueng, Y.F., et al. Identification of human liver cytochrome P-450 3A4 as the enzyme responsible for fentanyl and sufentanil N-dealkylation. *Anesth. Analg.* **82(1)**, 167-172 (1996).

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

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