PRODUCT INFORMATION



Crotonyl fentanyl-d₅

Item No. 25132

CAS Registry No.: 2747917-37-7

Formal Name: (E)-N-(1-phenethylpiperidin-4-yl)-N-

(phenyl-d_E)but-2-enamide

MF: $C_{23}H_{23}D_5N_2O$

FW: 353.5

Chemical Purity: ≥98% (Crotonyl fentanyl)

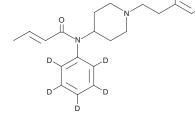
Deuterium

 \geq 99% deuterated forms (d₁-d₅); \leq 1% d₀ Incorporation:

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

Crotonyl fentanyl-d₅ (Item No. 25132) is intended for use as an internal standard for the quantification of crotonyl fentanyl (Item No. 22801) by GC- or LC-MS. Crotonyl fentanyl is categorized as an opioid. 1-3 It induces generalized responses in mice trained to discriminate oxycodone from saline.⁴ Crotonyl fentanyl-d₅ is regulated as a Schedule I compound in the United States. This product is intended for research and forensic applications.

References

- 1. Eshleman, A.J., Nagarajan, S., Wolfrum, K.M., et al. Affinity, potency, efficacy, selectivity, and molecular modeling of substituted fentanyls at opioid receptors. Biochem. Pharmacol. 182, 114293 (2020).
- 2. Vasudevan, L., Vandeputte, M.M., Deventer, M., et al. Assessment of structure-activity relationships and biased agonism at the Mu opioid receptor of novel synthetic opioids using a novel, stable bio-assay platform. Biochem. Pharmacol. 177, 113910 (2020).
- Varshneya, N.B., Walentiny, D.M., Moisa, L.T., et al. Opioid-like antinociceptive and locomotor effects of emerging fentanyl-related substances. Neuropharmacology 151, 171-179 (2019).
- Walentiny, D.M., Moisa, L.T., and Beardsley, P.M. Oxycodone-like discriminative stimulus effects of fentanyl-related emerging drugs of abuse in mice. Neuropharmacology 150, 210-216 (2019).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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