

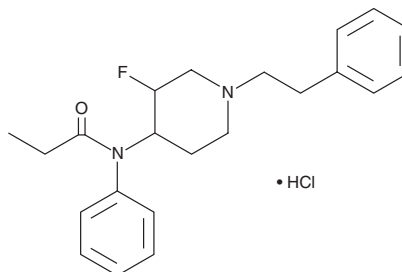
# PRODUCT INFORMATION



## 3-Fluorofentanyl (hydrochloride)

Item No. 21952

**CAS Registry No.:** 2309383-04-6  
**Formal Name:** N-[3-fluoro-1-(2-phenylethyl)-4-piperidyl]-N-phenyl-propanamide, monohydrochloride  
**MF:** C<sub>22</sub>H<sub>27</sub>FN<sub>2</sub>O • HCl  
**FW:** 390.9  
**Purity:** ≥98%  
**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

3-Fluorofentanyl (hydrochloride) (Item No. 21952) is an analytical reference standard categorized as an opioid.<sup>1,2</sup> 3-Fluorofentanyl reduces acute and persistent pain selectively in injured areas, without adverse effects common to opiates, such as sedation, constipation, and lowered respiratory rate, in rats.<sup>1</sup> It is also without rewarding effects in an unbiased conditioned place preference test at a dose that would be lethal for fentanyl (Item Nos. ISO60197 | 23580 | 14719) in rats. 3-Fluorofentanyl is regulated as a Schedule I compound in the United States. This product is intended for research and forensic applications.

### References

1. Spahn, V., Del Vecchio, G., Labuz, D., *et al.* A nontoxic pain killer designed by modeling of pathological receptor conformations. *Science* **355(6328)**, 966-969 (2017).
2. Edwards, S.R., Blough, B.E., Cowart, K., *et al.* Assessment of the antinociceptive, respiratory-depressant, and reinforcing effects of the low pK<sub>a</sub> fluorinated fentanyl analogs, FF3 and NFEP. *Neuropharmacology* **255**, 110002 (2024).

#### 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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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