## PRODUCT INFORMATION



## **β-hydroxy Fentanyl (hydrochloride)**

Item No. 20789

CAS Registry No.: 1473-95-6

Formal Name: N-[1-(2-hydroxy-2-phenylethyl)-

4-piperidinyl]-N-phenyl-

propanamide, monohydrochloride

Synonyms: NIH 10506, R-4333 MF: C<sub>22</sub>H<sub>28</sub>N<sub>2</sub>O<sub>2</sub> • HCl

FW: 388.9 **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.



β-hydroxy Fentanyl (hydrochloride) (Item No. 20789) is an analytical reference standard that is structurally categorized as an opioid. It is more potent than fentanyl (Item Nos. ISO60197 | 14719) at the wild-type  $\mu$ -opioid receptor in vitro (EC<sub>50</sub>s = 38.1 and 64.9 nM, respectively).<sup>1</sup> This compound differs from the hydroxyproprionyl compound that has been described as a metabolite of fentanyl.<sup>2</sup> The physiological and toxicological properties of β-hydroxy fentanyl are not known. This product is intended for research and forensic applications.

## References

- 1. Pil, J. and Tytgat, J. Serine 329 of the μ-opioid receptor interacts differently with agonists. J. Pharm. Exp. Ther. 304(3), 924-930 (2003).
- 2. Labroo, R.B., Paine, M.F., Thummel, K.E., et al. Fentanyl metabolism by human hepatic and intestinal cytochrome P450 3A4: Implications for interindividual variability in disposition, efficacy, and drug interactions. Drug Metab. Dispos. 25(9), 1072-1079 (1997).

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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