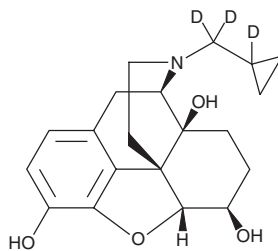


# PRODUCT INFORMATION



## 6 $\beta$ -Naltrexol-d<sub>3</sub> Item No. 18350

**CAS Registry No.:** 1435727-11-9  
**Formal Name:** (5 $\alpha$ ,6 $\beta$ )-17-(cyclopropylmethyl)-4,5-epoxy-d<sub>3</sub>-morphinan-3,6,14-triol  
**Synonym:** 6 $\beta$ -hydroxy Naltrexone-d<sub>3</sub>  
**MF:** C<sub>20</sub>H<sub>22</sub>D<sub>3</sub>NO<sub>4</sub>  
**FW:** 346.4  
**Purity:**  $\geq$ 98%  
**Supplied as:** A neat solid  
**Storage:** -20°C  
**Stability:**  $\geq$ 5 years



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

### Description

6 $\beta$ -Naltrexol-d<sub>3</sub> (Item No. 18350) is intended for use as an internal standard for the quantification of 6 $\beta$ -naltrexol (Item No. 15896) 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).

6 $\beta$ -Naltrexol is the major metabolite of naltrexone (Item Nos. ISO60192 | 15520).<sup>1</sup> It is a neutral  $\mu$ -opioid receptor antagonist (K<sub>i</sub> = 94 pM).<sup>2,3</sup> This product is intended for research and forensic applications.

This product is qualified as a Reference Material that has been manufactured and tested to ISO/IEC 17025 and ISO 17034 international standards.

### References

1. Porter, S. J., Somogyi, A. A., and White, J. M. Kinetics and inhibition of the formation of 6 $\beta$ -naltrexol from naltrexone in human liver cytosol. *Br. J. Clin. Pharmacol.* **50(5)**, 465-471 (2000).
2. Wang, D., Raehal, K. M., Bilsky, E. J., et al. Inverse agonists and neutral antagonists at  $\mu$  opioid receptor (MOR): Possible role of basal receptor signaling in narcotic dependence. *J. Neurochem.* **77(6)**, 1590-1600 (2007).
3. Porter, S. J., Somogyi, A. A., and White, J. M. *In vivo* and *in vitro* potency studies of 6 $\beta$ -naltrexol, the major human metabolite of naltrexone. *Addict. Biol.* **7(2)**, 219-225 (2002).

#### 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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