

# PRODUCT INFORMATION



## 11-keto Testosterone-d<sub>3</sub>

Item No. 9002754

CAS Registry No.: 2479914-03-7

Formal Name: (17 $\beta$ )-17-hydroxy-androst-4-ene-3,11-dione-16,16,17-d<sub>3</sub>

MF: C<sub>19</sub>H<sub>23</sub>D<sub>3</sub>O<sub>3</sub>

FW: 305.4

Chemical Purity:  $\geq 98\%$  (11-keto Testosterone)

Deuterium

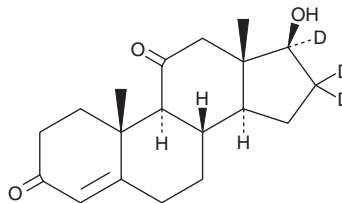
Incorporation:  $\geq 99\%$  deuterated forms (d<sub>1</sub>-d<sub>3</sub>);  $\leq 1\%$  d<sub>0</sub>

UV/Vis.:  $\lambda_{\text{max}}$ : 237 nm

Supplied as: A crystalline solid

Storage: -20°C

Stability:  $\geq 2$  years



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

### Description

11-keto Testosterone-d<sub>3</sub> (Item No. 9002754) is intended for use as an internal standard for the quantification of 11-keto testosterone (CRM) (Item No. 9002564) 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).

11-keto Testosterone is structurally categorized as an androgen. It is a significant hormone in certain fish, regulating the development of sexual development and behavior.<sup>1,2</sup> 11-keto Testosterone binds the stickleback kidney androgen receptor (EC<sub>50</sub> = 43 nM).<sup>3</sup> 11-keto Testosterone, at 10 nM, significantly activates the human androgen receptor expressed in zebrafish liver cells.<sup>3</sup> This product is intended for research and forensic applications.

### References

1. Yamaguchi, T., Watanuki, H., and Sakai, M. Effects of estradiol, progesterone and testosterone on the function of carp, *Cyprinus Carpio*, phagocytes *in vitro*. *Comp. Biochem. Physiol.* **129C**(1), 49-55 (2001).
2. Godwin, J. Neuroendocrinology of sexual plasticity in teleost fishes. *Front. Neuroendocrinol.* **31**(2), 203-216 (2010).
3. Olsson, P.-E., Berg, A.H., von Hofsten, J., *et al.* Molecular cloning and characterization of a nuclear androgen receptor activated by 11-ketotestosterone. *Reprod. Biol. Endocrinol.* **3**:37, (2005).

#### 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.

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