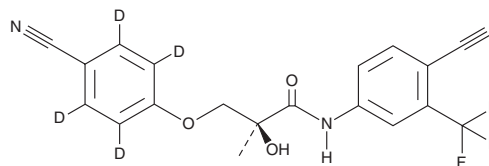


# PRODUCT INFORMATION



## Enobosarm-d<sub>4</sub> Item No. 34687

**CAS Registry No.:** 1202044-20-9  
**Formal Name:** (2S)-3-(4-cyanophenoxy-2,3,5,6-d<sub>4</sub>)-N-[4-cyano-3-(trifluoromethyl)phenyl]-2-hydroxy-2-methyl-propanamide  
**Synonym:** (S)-Enobosarm-d<sub>4</sub>  
**MF:** C<sub>19</sub>H<sub>10</sub>D<sub>4</sub>F<sub>3</sub>N<sub>3</sub>O<sub>3</sub>  
**FW:** 393.4  
**Chemical Purity:** ≥98% (Enobosarm)  
**Deuterium Incorporation:** ≥99% deuterated forms (d<sub>1</sub>-d<sub>4</sub>); ≤1% d<sub>0</sub>  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years



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

### Laboratory Procedures

Enobosarm-d<sub>4</sub> is intended for use as an internal standard for the quantification of enobosarm 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).

Enobosarm-d<sub>4</sub> is supplied as a solid. A stock solution may be made by dissolving the enobosarm-d<sub>4</sub> in the solvent of choice, which should be purged with an inert gas. Enobosarm-d<sub>4</sub> is soluble in organic solvents such as methanol, DMSO, and dimethyl formamide.

### Description

Enobosarm is a non-steroidal selective androgen receptor modulator (SARM; K<sub>i</sub> = 0.0038 μM in a radioligand binding assay).<sup>1</sup> It is a partial agonist of the androgen receptor (IC<sub>50</sub> = 0.0364 μM in a transactivation assay) and inhibits the proliferation of 22Rv1, DU145, LNCaP, and VCaP prostate cancer cells (IC<sub>50</sub>s = 24.77, 44.55, 20.9, and 24.47 μM, respectively).<sup>2</sup> Enobosarm (0.001 and 0.01 μM) inhibits lipogenesis in isolated rat adipocytes.<sup>3</sup> It increases the weights of the prostate gland and seminal vesicles, markers of androgenic activity, and the levator ani muscle, a marker of anabolic activity, in castrated rats (ED<sub>50</sub>s = 0.12, 0.39, and 0.03 mg/day, respectively).<sup>1</sup>

### References

1. Kim, J., Wu, D., Hwang, D.J., *et al.* The *para* substituent of S-3-(phenoxy)-2-hydroxy-2-methyl-N-(4-nitro-3-trifluoromethyl-phenyl)-propionamides is a major structural determinant of in vivo disposition and activity of selective androgen receptor modulators. *J. Pharmacol. Exp. Ther.* **315**(1), 230-239 (2005).
2. Bassetto, M., Ferla, S., Pertusati, F., *et al.* Design and synthesis of novel bicalutamide and enzalutamide derivatives as antiproliferative agents for the treatment of prostate cancer. *Eur. J. Med. Chem.* **118**, 230-243 (2016).
3. Leciejewska, N., Pruszynska-Oszmalek, E., Bien, J., *et al.* Effect of ostarine (enobosarm/GTX024), a selective androgen receptor modulator, on adipocyte metabolism in Wistar rats. *J. Physiol. Pharmacol.* **70**(4), 525-533 (2019).

#### 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

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#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897  
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM