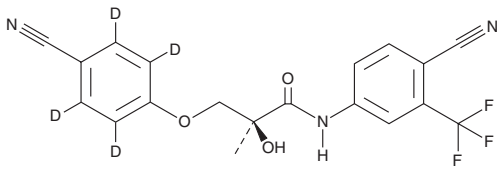
PRODUCT INFORMATION

Enobosarm-d_4

Item No. 34687

CAS Registry No.: 1202044-20-9
Formal Name: (2S)-3-(4-cyanophenoxy-2,3,5,6-d_4)-N-[4-cyano-3-(trifluoromethyl)phenyl]-2-hydroxy-2-methyl-propanamide
Synonym: (S)-Enobosarm-d_4
MF: $C_{19}H_{10}D_4F_3N_3O_3$
FW: 393.4
Chemical Purity: ≥98% (Enobosarm)
Deuterium Incorporation: ≥99% deuterated forms (d_1-d_4); ≤1% d_0
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_4 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_4 is supplied as a solid. A stock solution may be made by dissolving the enobosarm-d_4 in the solvent of choice, which should be purged with an inert gas. Enobosarm-d_4 is soluble in organic solvents such as methanol, DMSO, and dimethyl formamide.

Description

Enobosarm is a non-steroidal selective androgen receptor modulator (SARM; K_i = 0.0038 µM in a radioligand binding assay).[1] It is a partial agonist of the androgen receptor (IC_{50} = 0.0364 µM in a transactivation assay) and inhibits the proliferation of 22Rv1, DU145, LNCaP, and VCaP prostate cancer cells (IC_{50}s = 24.77, 44.55, 20.9, and 24.47 µM, respectively).[2] Enobosarm (0.001 and 0.01 µM) inhibits lipogenesis in isolated rat adipocytes.[3] 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_{50}s = 0.12, 0.39, and 0.03 mg/day, respectively).[1]

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).

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