

# PRODUCT INFORMATION



## Ostarine

Item No. 11603

CAS Registry No.: 841205-47-8

Formal Name: (2S)-3-(4-cyanophenoxy)-N-[4-cyano-3-(trifluoromethyl)phenyl]-2-hydroxy-2-methyl-propanamide

Synonyms: Enobosarm, GTx-024, MK-2866, SARM S-22

MF:  $C_{19}H_{14}F_3N_3O_3$

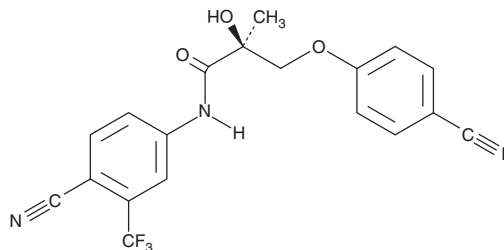
FW: 389.3

Purity:  $\geq 98\%$

Stability:  $\geq 2$  years at  $-20^{\circ}C$

Supplied as: A crystalline solid

UV/Vis.:  $\lambda_{max}$ : 251, 271 nm



### Laboratory Procedures

For long term storage, we suggest that ostarine be stored as supplied at  $-20^{\circ}C$ . It should be stable for at least two years.

Ostarine is supplied as a crystalline solid. A stock solution may be made by dissolving the ostarine in the solvent of choice. Ostarine is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of ostarine in ethanol is approximately 25 mg/ml and approximately 15 mg/ml in DMSO and DMF.

Ostarine is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ostarine should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Ostarine has a solubility of approximately 0.2 mg/ml in a 1:4 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Ostarine is a non-steroidal selective androgen receptor modulator that binds the androgen receptor with a  $K_i$  value of 3.8 nM *in vitro*.<sup>1</sup> At a dose of 0.03 mg/day in castrated male rats, ostarine showed anabolic effects selective for bone and muscle tissue while demonstrating limited effects on other androgen-responsive tissues including prostate and seminal vesicles.<sup>1</sup> In a phase II clinical trial ostarine displayed a dose-dependent improvement in total lean body mass and physical function in patients with cancer-associated cachexia (muscle wasting).<sup>2</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. Dalton, J.T., Barnette, K.G., Bohl, C.E., *et al.* The selective androgen receptor modulator GTx-024 (enobosarm) improves lean body mass and physical function in healthy elderly men and postmenopausal women: results of a double-blind, placebo-controlled phase II trial. *J. Cachexia Sarcopenia Muscle* **2**(3), 153-161 (2011).

#### 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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