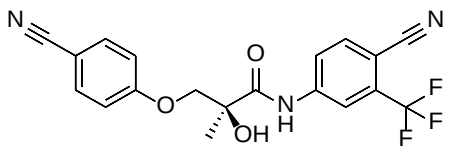
Product data sheet

MedKoo Cat#: 202103 Name: Ostarine (MK2866) CAS#: 841205-47-8 Chemical Formula: $C_{19}H_{14}F_3N_3O_3$ Exact Mass: 389.0987 Molecular Weight: 389.33	
Product supplied as:	Powder
Purity (by HPLC):	≥ 98%
Shipping conditions	Ambient temperature
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years.
	In solvent: -80°C 3 months; -20°C 2 weeks.

1. Product description:
Ostarine, aslo known as Enobosarm, and MK-2866 and GTX-024, is selective androgen receptor modulator with anabolic activity. Selective androgen receptor modulator (SARM) GTx-024 is designed to work like testosterone, thus promoting and/or maintaining libido, fertility, prostate growth, and muscle growth and strength. Mimicking testosterone's action, this agent may increase lean body mass, thereby ameliorating muscle wasting in the hypermetabolic state of cancer cachexia.

2. CoA, QC data, SDS, and handling instruction
SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under “QC And Documents” section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
DMSO	70.0	179.8

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.57 mL	12.84 mL	25.69 mL
5 mM	0.51 mL	2.57 mL	5.14 mL
10 mM	0.26 mL	1.28 mL	2.57 mL
50 mM	0.05 mL	0.26 mL	0.51 mL

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator
Please refer the product web page under section of “Calculator”

6. Recommended literature which reported protocols for in vitro and in vivo study
In vitro study

TBD

In vivo study

1. Hoffmann DB, Komrakova M, Pflug S, von Oertzen M, Saul D, Weiser L, Walde TA, Wassmann M, Schilling AF, Lehmann W, Sehmisch S. Evaluation of ostarine as a selective androgen receptor modulator in a rat model of postmenopausal osteoporosis. J Bone Miner Metab. 2019 Mar;37(2):243-255. doi: 10.1007/s00774-018-0929-9. Epub 2018 May 21. PMID: 29785666.

7. Bioactivity
Biological target: GTx-007 is a selective androgen receptor modulator (SARM) and a partial agonist with a Ki of 4 nM.

In vitro activity

TBD

In vivo activity

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The effects of the SARM drug ostarine on postmenopausal osteoporotic bone was evaluated in a rat osteoporosis model. Low dose showed no effects. The effects of intermediate and high doses were comparable overall. Improvements were mainly seen in structural properties such as bone mineral density and bone volume density. However, the effects in femora were superior to effects in vertebrae. mRNA expression of the receptor activator of NF-κB ligand decreased after treatment, and uterine weight increased. Serum levels of phosphorus increased following ostarine treatment in intermediate and high-dose groups. Short-term treatment of osteoporotic bone with ostarine led to improvement of several microstructural bone indices. While no changes in biomechanics were observed, it is conceivable that longer treatment may also improve biomechanical properties. Further studies are needed to characterize longer time effects and side effects of ostarine in osteoporosis.

Reference: J Bone Miner Metab. 2019 Mar;37(2):243-255. https://link.springer.com/article/10.1007%2Fs00774-018-0929-9