

# YK-11

## PRODUCT OVERVIEW

| Specification        | Details                                                |
|----------------------|--------------------------------------------------------|
| Generic Name         | YK-11                                                  |
| Drug Class           | Selective Androgen Receptor Modulator (SARM)           |
| Active Ingredient    | YK-11                                                  |
| Administration Route | Oral                                                   |
| Dosage Form          | Oral Compound                                          |
| Chemical Class       | Steroidal SARM / Partial Androgen Receptor Agonist     |
| Aromatization        | Does not undergo conventional aromatization            |
| Clinical Status      | Experimental; not approved as a therapeutic medication |



## INTRODUCTION

YK-11 is an experimental androgen receptor modulator that has been described in scientific literature as a partial agonist of the androgen receptor and a compound with SARM-like characteristics. Unlike many commonly discussed SARMs, YK-11 has a steroidal backbone, making its chemical structure distinct from non-steroidal compounds such as Ostarine, Ligandrol, and RAD-140.

Research on YK-11 has focused particularly on androgen receptor signaling, muscle-cell differentiation, and the expression of follistatin, a protein involved in regulation of myostatin and other members of the TGF- $\beta$  family.



## HISTORY

YK-11 was first characterized in scientific research investigating novel compounds capable of interacting with the androgen receptor. Early laboratory work identified YK-11 as a partial androgen receptor agonist and demonstrated that it could promote androgen receptor nuclear translocation without producing the conventional N/C interaction associated with some androgen agonists. Subsequent cell-based research found that YK-11 promoted myogenic differentiation of C2C12 muscle cells and increased follistatin expression, providing a scientific basis for further investigation of its anabolic signaling properties. Later studies examined YK-11 metabolism and its detection in biological samples. Despite this research, YK-11 remains an experimental compound without an approved therapeutic indication for humans.



## CHEMICAL STRUCTURE

YK-11 is a steroidal compound structurally related to the 19-norsteroid family. Its chemical structure differs from the non-steroidal SARMs commonly encountered in research.

The compound has been characterized as a partial androgen receptor agonist, with its molecular structure allowing interaction with the androgen receptor and modulation of receptor-mediated gene expression.



## CHEMICAL PROFILE

| Parameter              | Information                                 |
|------------------------|---------------------------------------------|
| Primary Components     | YK-11                                       |
| Hormone Classification | Selective Androgen Receptor Modulator       |
| Administration         | Oral                                        |
| Dosage Form            | Oral Compound                               |
| Development Code       | Arylpropionamide SARM                       |
| Chemical Class         | Steroidal SARM                              |
| Aromatization          | Does not undergo conventional aromatization |

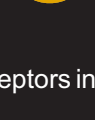


## PHARMACOLOGY

YK-11 interacts with the androgen receptor (AR) and has been characterized experimentally as a partial agonist.

Laboratory research demonstrated that YK-11 can promote androgen receptor nuclear translocation and regulate androgen-responsive gene expression. Its activity appears to differ from conventional androgen agonists because it does not produce the same androgen receptor N/C interaction observed with some endogenous androgens.

Research has also identified effects on muscle-cell differentiation and follistatin expression, although these findings are primarily derived from laboratory and preclinical models rather than established human clinical trials.



## MECHANISM OF ACTION

The proposed mechanism involves androgen receptor activation.

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- Oral absorption
- Systemic distribution
- Binding to androgen receptors
- Formation of receptor-ligand complexes
- Nuclear translocation
- Regulation of androgen-responsive gene transcription
- Modulation of muscle-cell differentiation pathways
- Alteration of follistatin expression

Research suggests that increased follistatin expression may contribute to the myogenic effects observed in cultured muscle cells.



## PHARMACODYNAMICS

YK-11 produces its biological activity primarily through androgen receptor signaling and associated cellular pathways.

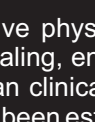


## SKELETAL MUSCLE SYSTEM

Anabolic-androgenic steroids interact with androgen receptors in skeletal muscle and may influence:

- Protein metabolism
- Muscle tissue maintenance
- Nitrogen metabolism
- Muscle cell function

Androgen receptor signaling contributes to the regulation of normal skeletal muscle structure and function.



## SKELETAL SYSTEM

Androgen receptor signaling contributes to skeletal physiology and may influence:

- Bone remodeling
- Skeletal maintenance
- Bone metabolism
- Structural integrity



## CONNECTIVE TISSUE

Androgen receptor signaling may influence connective tissue physiology through:

- Structural protein metabolism
- Tissue maintenance
- Tissue remodeling
- Collagen metabolism



## REPRODUCTIVE SYSTEM

Androgenic compounds interact with androgen-sensitive tissues and may influence:

- Hormonal regulation
- Endocrine signaling
- Reproductive physiology
- Androgen-responsive tissues

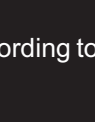


## PHARMACOKINETICS

Human pharmacokinetic information for YK-11 is very limited compared with approved pharmaceutical medicines.

Available research has focused largely on metabolism and analytical detection rather than establishing a validated therapeutic pharmacokinetic profile. Studies have identified multiple metabolites following YK-11 exposure and have demonstrated substantial metabolic conversion of the compound.

Because reliable human clinical pharmacokinetic data are limited, a definitive therapeutic half-life or standardized bioavailability value should not be assigned to YK-11.



## PHYSIOLOGICAL EFFECTS

YK-11 has been investigated primarily for its effects on androgen receptor signaling and muscle-cell differentiation. Laboratory studies demonstrated that YK-11 can promote myogenic differentiation in cultured muscle cells and increase expression of follistatin, a protein involved in regulating myostatin and related signaling pathways. These findings provide a possible explanation for the anabolic activity observed in experimental models, but they should not be interpreted as established clinical effects in humans.

YK-11 may also influence broader androgen-responsive physiological systems through androgen receptor activation. Potential effects include changes in muscle tissue signaling, endocrine regulation, reproductive hormone pathways, and other androgen-dependent processes. However, human clinical evidence remains extremely limited, and the long-term physiological effects and safety profile of YK-11 have not been established.



## CLINICAL APPLICATIONS

YK-11 has no established approved clinical application. Its scientific investigation has primarily focused on androgen receptor biology, muscle-cell differentiation, and pathways associated with muscle growth.

Research has examined:

- Androgen receptor signaling
- Myogenic differentiation
- Follistatin expression
- Muscle-cell physiology
- Myostatin-related pathways

These findings remain primarily preclinical. YK-11 has not been demonstrated through adequate human clinical trials to be a safe or effective treatment for muscle wasting, sarcopenia, or other medical conditions.



## SAFETY CONSIDERATIONS

The use of anabolic-androgenic steroids may require consideration of cardiovascular, hematological, hepatic, endocrine, metabolic, and reproductive health.

Important safety considerations include:

- Cardiovascular health
- Blood pressure
- Hematological parameters
- Lipid profile
- Liver function
- Endocrine function
- Reproductive function
- Prostate health

The overall safety profile depends on the specific compound, formulation, concentration, duration of exposure, individual response, and patient characteristics. Appropriate medical evaluation and regular monitoring should be considered when clinically indicated.



## POTENTIAL ADVERSE EFFECTS

Potential adverse effects associated with anabolic-androgenic steroid exposure may involve endocrine, cardiovascular, hematological, hepatic, dermatological, reproductive, and metabolic systems.

Endocrine Effects

- Suppression of endogenous hormone production
- Alterations in hormonal balance
- Changes in reproductive hormone signaling
- Potential suppression of spermatogenesis

Cardiovascular Effects

- Changes in lipid profile
- Possible increases in blood pressure
- Potential cardiovascular risk

Hematological Effects

- Changes in hematocrit
- Changes in hemoglobin
- Possible increase in erythropoietic activity

Dermatological Effects

- Acne
- Increased sebaceous activity
- Androgen-related hair loss in genetically predisposed individuals

Reproductive Effects

- Changes in reproductive function
- Potential reduction in fertility
- Alterations in reproductive hormone regulation

Hepatic & Metabolic Effects

- Changes in liver function parameters
- Alterations in metabolic markers
- Changes in glucose and lipid metabolism

The occurrence and severity of adverse effects vary according to the specific compound, formulation, exposure, duration of use, individual response, and patient characteristics.



## CONTRAINDICATIONS

| Condition                          | Reason                              |
|------------------------------------|-------------------------------------|
| Severe hepatic disease             | Increased hepatic risk              |
| Hormone-sensitive cancers          | Androgen receptor sensitivity       |
| Pregnancy                          | Potential risk of fetal development |
| Known hypersensitivity             | Allergic reaction                   |
| Significant cardiovascular disease | Potential cardiovascular effects    |



## DRUG INTERACTIONS

A comprehensive interaction profile may not be established for every anabolic-androgenic steroid or formulation.

Potential interactions or clinical considerations may exist with:

- Anticoagulants
- Antidiabetic medications
- Hepatotoxic medications
- Other anabolic-androgenic steroids
- Other hormonal therapies
- Drugs affecting lipid metabolism

The clinical significance of potential interactions depends on the specific compound, formulation, dosage, duration of exposure, concomitant medications, and individual patient characteristics. Appropriate medical evaluation should be considered when multiple medications or hormonal therapies are used concurrently.



## LABORATORY MONITORING

| Laboratory Test    | Purpose                          |
|--------------------|----------------------------------|
| CBC                | Monitor hematological parameters |
| ALT / AST          | Liver function                   |
| Bilirubin          | Hepatic assessment               |
| Lipid Profile      | Cardiovascular risk assessment   |
| Blood Pressure     | Cardiovascular monitoring        |
| Total Testosterone | Assess androgen status           |
| LH / FSH           | Assess endocrine suppression     |



## STORAGE & STABILITY

- \* Store according to official product labeling.
- \* Protect from excessive heat and direct sunlight.
- \* Do not freeze.
- \* Maintain original packaging integrity.
- \* Keep away from children.
- \* Inspect packaging before use.



## PRODUCT AUTHENTICITY

Every genuine NEXON product should include appropriate quality verification features.

Authentication may include:

- \* Batch number tracking
  - \* Manufacturing information
  - \* Expiration date verification
  - \* QR authentication system
  - \* Authorized distribution verification
- NEXON emphasizes transparency, traceability, and product quality control.



## FREQUENTLY ASKED QUESTIONS

What is YK-11?

YK-11 is an experimental androgen receptor modulator that has been characterized as a partial androgen receptor agonist with SARM-like properties.

Is YK-11 a steroid?

Unlike many commonly discussed SARMs, YK-11 has a steroidal chemical backbone. Scientific literature specifically describes it as a steroidal compound with selective androgen receptor activity.

Is YK-11 oral or injectable?

YK-11 is generally encountered as an orally administered research compound.

What is the relationship between YK-11 and follistatin?

Laboratory research found that YK-11 increased follistatin expression in C2C12 muscle cells and that blocking follistatin reduced the observed myogenic differentiation response.

Is YK-11 a myostatin inhibitor?

YK-11 is often marketed as a myostatin inhibitor, but the scientific evidence is more nuanced. The strongest early evidence demonstrated increased follistatin expression and associated myogenic differentiation in cultured cells rather than establishing a direct myostatin-inhibitor effect in humans.



## NEXON QUALITY COMMITMENT

NEXON is committed to maintaining high standards of manufacturing quality, product consistency, traceability, and scientific transparency.

Through quality control systems, authentication procedures, and responsible information sharing, NEXON aims to provide reliable pharmaceutical products and educational resources for healthcare professionals and informed users.



## SCIENTIFIC REFERENCES

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