



# AR Monoclonal Antibody

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|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Catalog No</b>                  | YP-Ab-03252                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Reactivity</b>                  | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Applications</b>                | WB;ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Gene Name</b>                   | AR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>                   | Purified recombinant fragment of AR (aa689-919) expressed in E. Coli.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Specificity</b>                 | AR Monoclonal Antibody detects endogenous levels of AR protein.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Formulation</b>                 | Ascitic fluid containing 0.03% sodium azide, 0.5% BSA, 50% glycerol.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Source</b>                      | Monoclonal, Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Purification</b>                | Affinity purification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Dilution</b>                    | Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Synonyms</b>                    | AIS;ANDR_HUMAN;Androgen nuclear receptor variant 2;Androgen receptor (dihydrotestosterone receptor;testicular feminization;spinal and bulbar muscular atrophy;Kennedy disease);Androgen receptor;androgen receptor splice variant 4b;AR;AR8;DHTR;Dihydro testosterone receptor;Dihydrotestosterone receptor (DHTR);Dihydrotestosterone receptor;HUMARA;HYSP1;KD;Kennedy disease (KD);NR3C4;Nuclear receptor subfamily 3 group C member 4 (NR3C4);Nuclear receptor subfamily 3 group C member 4;SBMA;SMA1;Spinal and bulbar muscular atrophy (SBMA);Testicular Feminization (TFM);TFM |
| <b>Observed Band</b>               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Calculated Molecular Weight</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Cell Pathway</b>                | Nucleus . Cytoplasm . Detected at the promoter of target genes (PubMed:25091737). Predominantly cytoplasmic in unligated form but translocates to the nucleus upon ligand-binding. Can also translocate to the nucleus in unligated form in the presence of RACK1. .                                                                                                                                                                                                                                                                                                                 |
| <b>Tissue Specificity</b>          | [Isoform 2]: Mainly expressed in heart and skeletal muscle. ; [Isoform 3]: Expressed in basal and stromal cells of the prostate (at protein level).                                                                                                                                                                                                                                                                                                                                                                                                                                  |



## Function

disease: Defects in AR are the cause of androgen insensitivity syndrome (AIS) [MIM:300068]; previously known as testicular feminization syndrome (TFM). AIS is an X-linked recessive form of pseudohermaphroditism due end-organ resistance to androgen. Affected males have female external genitalia, female breast development, blind vagina, absent uterus and female adnexa, and abdominal or inguinal testes, despite a normal 46,XY karyotype., disease: Defects in AR are the cause of androgen insensitivity syndrome partial (PAIS) [MIM:312300]; also known as Reifenstein syndrome. PAIS is characterized by hypospadias, hypogonadism, gynecomastia, genital ambiguity, normal XY karyotype, and a pedigree pattern consistent with X-linked recessive inheritance. Some patients present azoospermia or severe oligospermia without other clinical manifestations., disease: Defects in AR are the cause of spinal and bulb

## Background

The androgen receptor gene is more than 90 kb long and codes for a protein that has 3 major functional domains: the N-terminal domain, DNA-binding domain, and androgen-binding domain. The protein functions as a steroid-hormone activated transcription factor. Upon binding the hormone ligand, the receptor dissociates from accessory proteins, translocates into the nucleus, dimerizes, and then stimulates transcription of androgen responsive genes. This gene contains 2 polymorphic trinucleotide repeat segments that encode polyglutamine and polyglycine tracts in the N-terminal transactivation domain of its protein. Expansion of the polyglutamine tract from the normal 9-34 repeats to the pathogenic 38-62 repeats causes spinal bulbar muscular atrophy (Kennedy disease). Mutations in this gene are also associated with complete androgen insensitivity (CAIS). Two alternatively spliced variants encoding distinct isoform

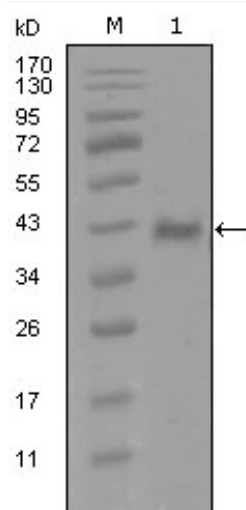
## matters needing attention

Avoid repeated freezing and thawing!

## Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## Products Images



Western Blot analysis using AR Monoclonal Antibody against truncated Trx-AR recombinant protein (1).