



# AR Monoclonal Antibody

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| <b>Catalog No</b>                      | YP-mAb-03306                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Isotype</b>                         | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Reactivity</b>                      | Human;Mouse;Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Applications</b>                    | WB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Gene Name</b>                       | AR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Immunogen</b>                       | The antiserum was produced against synthesized peptide derived from human c-<br>terminal Androgen Receptor. AA range:621-670                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Specificity</b>                     | AR Monoclonal Antibody detects endogenous levels of AR protein.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Formulation</b>                     | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Source</b>                          | Monoclonal, Mouse,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Purification</b>                    | The antibody was affinity-purified from mouse antiserum by affinity-<br>chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Dilution</b>                        | WB 1:500-1:2000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Concentration</b>                   | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Purity</b>                          | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Storage Stability</b>               | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Synonyms</b>                        | AKR1B 1;Aldo-keto reductase family 1 member B1;ALDR1;ALR2;AR;Androgen<br>Receptor;DHTR;NR3C4;Dihydrotestosterone receptor;Nuclear receptor<br>subfamily 3 group C member 4                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Observed Band</b>                   | 99kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Calculated Molecular<br/>Weight</b> | 99kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Cell Pathway</b>                    | Nucleus . Cytoplasm . Detected at the promoter of target genes<br>(PubMed:25091737). Predominantly cytoplasmic in unligated form but<br>translocates to the nucleus upon ligand-binding. Can also translocate to the<br>nucleus in unligated form in the presence of RACK1. .                                                                                                                                                                                                                                                                          |
| <b>Tissue Specificity</b>              | [Isoform 2]: Mainly expressed in heart and skeletal muscle. ; [Isoform 3]:<br>Expressed in basal and stromal cells of the prostate (at protein level).                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Function</b>                        | disease:Defects in AR are the cause of androgen insensitivity syndrome (AIS)<br>[MIM:300068]; previously known as testicular feminization syndrome (TFM). AIS<br>is an X-linked recessive form of pseudohermaphroditism due end-organ<br>resistance to androgen. Affected males have female external genitalia, female<br>breast development, blind vagina, absent uterus and female adnexa, and<br>abdominal or inguinal testes, despite a normal 46,XY karyotype.,<br>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

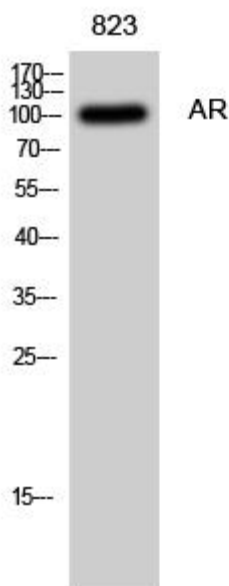
#### matters needing attention

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 of various cells using AR Monoclonal Antibody