



# AR Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-03306
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Rat;Mouse;
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	AR
<b>Protein Name</b>	Androgen receptor
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human c-terminal Androgen Receptor. AA range:621-670
<b>Specificity</b>	AR Polyclonal 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>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/40000.. IF 1:50-200
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	AR; DHTR; NR3C4; Androgen receptor; Dihydrotestosterone receptor; Nuclear receptor subfamily 3 group C member 4
<b>Observed Band</b>	99kD
<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).
<b>Function</b>	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**

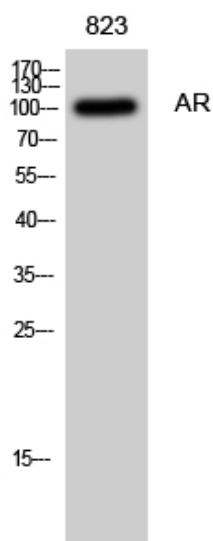
Avoid repeated freezing and thawing!

**Usage suggestions**

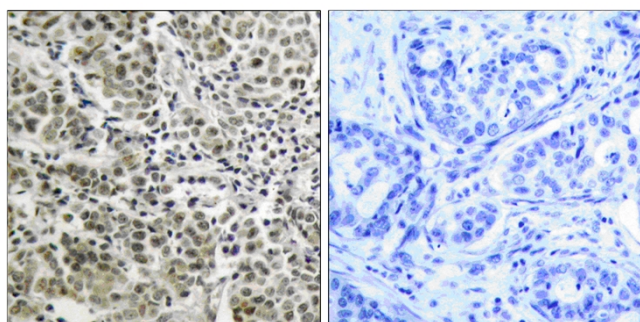
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



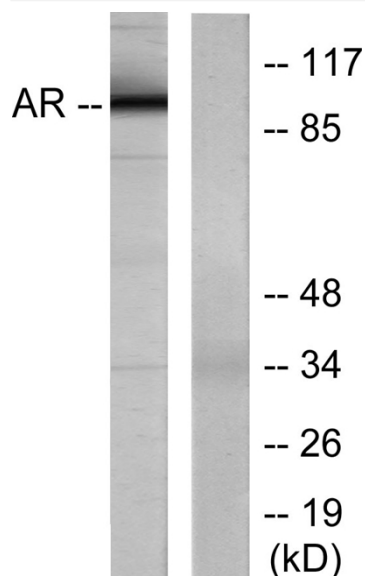
## Products Images



Western Blot analysis of 823 cells using AR Polyclonal Antibody diluted at 1:500



Immunohistochemistry analysis of paraffin-embedded human prostate carcinoma tissue, using Androgen Receptor Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from LOVO cells, using Androgen Receptor Antibody. The lane on the right is blocked with the synthesized peptide.