

**Anti-Androgen Receptor Antibody**  
**Catalog # ABO10815****Specification**

---

**Anti-Androgen Receptor Antibody - Product Information**

Application	IHC, WB
Primary Accession	<a href="#">P10275</a>
Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Androgen receptor(AR) detection. Tested with WB, IHC-P, ICC in Human;Mouse.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-Androgen Receptor Antibody - Additional Information**

**Gene ID** 367

**Other Names**

Androgen receptor, Dihydrotestosterone receptor, Nuclear receptor subfamily 3 group C member 4, AR, DHTR, NR3C4

**Calculated MW**

98989 MW KDa

**Application Details**

Immunocytochemistry , 0.5-1 µg/ml<br>Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, By Heat<br>Western blot, 0.1-0.5 µg/ml<br>

**Subcellular Localization**

Nucleus. Cytoplasm. 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 GNB2L1.

**Tissue Specificity**

Isoform 2 is mainly expressed in heart and skeletal muscle. .

**Protein Name**

Androgen receptor

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human Androgen

Receptor(822-838aa LKNQKFFDELRMNYIKE), identical to the related rat and mouse sequences.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Sequence Similarities**

Belongs to the nuclear hormone receptor family. NR3 subfamily.

**Anti-Androgen Receptor Antibody - Protein Information**

**Name** AR

**Synonyms** DHTR, NR3C4

**Function**

Steroid hormone receptors are ligand-activated transcription factors that regulate eukaryotic gene expression and affect cellular proliferation and differentiation in target tissues (PubMed:<a href="http://www.uniprot.org/citations/19022849" target="\_blank">19022849</a>). Transcription factor activity is modulated by bound coactivator and corepressor proteins like ZBTB7A that recruits NCOR1 and NCOR2 to the androgen response elements/ARE on target genes, negatively regulating androgen receptor signaling and androgen-induced cell proliferation (PubMed:<a href="http://www.uniprot.org/citations/20812024" target="\_blank">20812024</a>). Transcription activation is also down-regulated by NR0B2. Activated, but not phosphorylated, by HIPK3 and ZIPK/DAPK3.

**Cellular Location**

Nucleus. Cytoplasm Note=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.

**Tissue Location**

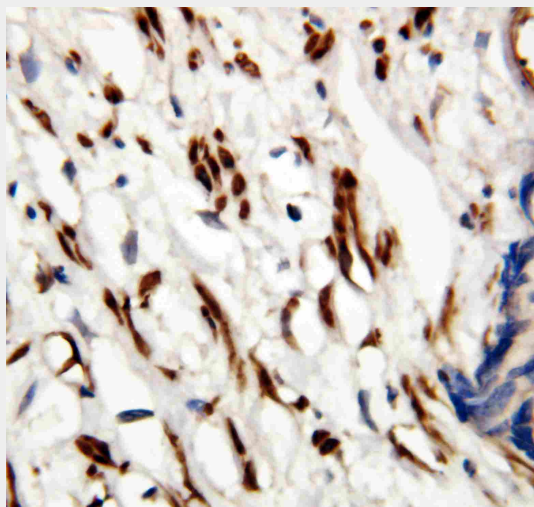
[Isoform 2]: Mainly expressed in heart and skeletal muscle.

**Anti-Androgen Receptor Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Anti-Androgen Receptor Antibody - Images



Anti-Androgen Receptor antibody, ABO10815, IHC(P)IHC(P): Human Prostatic Cancer Tissue

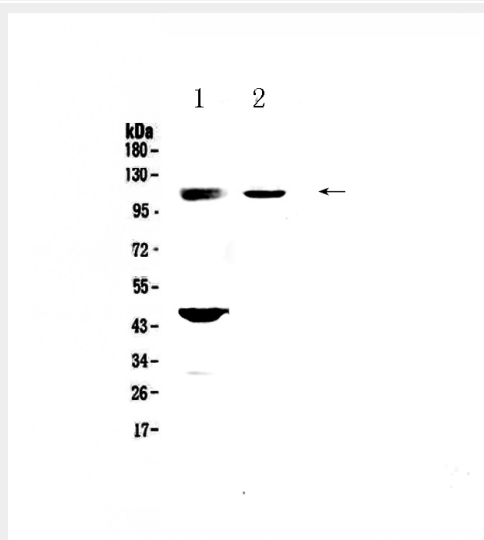


Figure 1. Western blot analysis of Androgen receptor using anti-Androgen receptor antibody (ABO10815). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: HELA whole Cell lysates, Lane 2: mouse pancreas tissue lysates, After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Androgen receptor antigen affinity purified polyclonal antibody (Catalog # ABO10815) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Androgen receptor at approximately 99KD. The expected band size for Androgen receptor is at 110KD.

## Anti-Androgen Receptor Antibody - Background

The AR(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 AR gene is mapped to Xq12. 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 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 isoforms have been described.