

**AR Antibody (Center)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP13058c****Specification**

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**AR Antibody (Center) - Product Information**

Application	WB,E
Primary Accession	<a href="#">P10275</a>
Other Accession	<a href="#">O97952</a> , <a href="#">NP_001011645.1</a>
Reactivity	Human
Predicted	Monkey
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	99188
Antigen Region	282-309

**AR Antibody (Center) - Additional Information****Gene ID** 367**Other Names**

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

**Target/Specificity**

This AR antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 282-309 amino acids from the Central region of human AR.

**Dilution**

WB~~1:1000

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

AR Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**AR Antibody (Center) - 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:[19022849](#)). 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:[20812024](#)). 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.

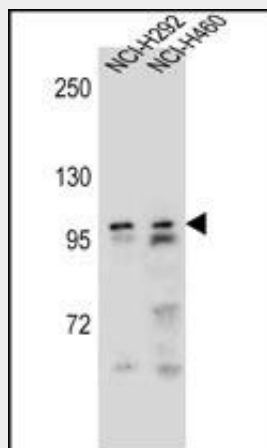
**Tissue Location**

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

**AR Antibody (Center) - 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](#)

**AR Antibody (Center) - Images**

AR Antibody (Center) (Cat. #AP13058c) western blot analysis in NCI-H292, NCI-H460 cell line lysates (35ug/lane). This demonstrates the AR antibody detected the AR protein (arrow).

**AR Antibody (Center) - 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 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. [provided by RefSeq].

#### **AR Antibody (Center) - References**

Shu, S.K., et al. J. Biol. Chem. 285(43):33045-33053(2010)  
Nedelsky, N.B., et al. Neuron 67(6):936-952(2010)  
Panda, B., et al. Gynecol. Endocrinol. (2010) In press :  
Schneider, G., et al. Am J Geriatr Psychiatry (2010) In press :  
Guadalupe-Grau, A., et al. PLoS ONE 5 (7), E11529 (2010) :