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AR Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13255c

Specification

AR Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	P10275
Other Accession	NP_001011645.1, NP_000035.2
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**475-504**

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 475-504 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.

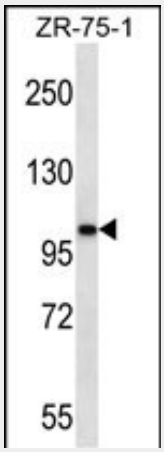
Tissue Location
[Isoform 2]: Mainly expressed in heart and skeletal muscle.

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 Cytomety
- Cell Culture

AR Antibody (Center) - Images



AR Antibody (Center) (Cat. #AP13255c) western blot analysis in ZR-75-1 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 :
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