

Androgen Receptor (ANDR) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2509A

### Specification

### Androgen Receptor (ANDR) Antibody - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region IHC-P, WB,E <u>P10275</u> <u>O9GKL7</u>, <u>P19091</u>, <u>O97952</u>, <u>O5JUN9</u> Human, Mouse Monkey, Pig Rabbit Polyclonal Rabbit IgG 99188 365-392

### Androgen Receptor (ANDR) Antibody - 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 Androgen Receptor (ANDR) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 365-392 amino acids from human Androgen Receptor (ANDR).

Dilution IHC-P~~1:10~50 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

Androgen Receptor (ANDR) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# Androgen Receptor (ANDR) 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:<u>19022849</u>). 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:<u>20812024</u>). 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.

# Androgen Receptor (ANDR) Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Androgen Receptor (ANDR) Antibody - Images



ANDR (Cat. #AP2509a) western blot analysis in mouse brain tissue lysates (35ug/lane). This demonstrates the AR antibody detected the AR protein (arrow).





ANDR Antibody (Sumo-site) (Cat. #AP2509a) western blot analysis in Hela cell line lysates (35ug/lane).This demonstrates the ANDR antibody detected the ANDR protein (arrow).



Androgen Receptor Antibody (ANDR) (Cat. #AP2509a)immunohistochemistry analysis in formalin fixed and paraffin embedded human liver tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of Androgen Receptor Antibody (ANDR) for immunohistochemistry. Clinical relevance has not been evaluated.

# Androgen Receptor (ANDR) Antibody - Background

Androgen receptor (ANDR) has 3 major functional domains: the N-terminal domain, DNA-binding domain, and an 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. The gene for this protein contains 2 polymorphic trinucleotide repeat segments that encode polyglutamine and polyglycine tracts in the N-terminal transactivation domain of the protein. Expansion of the polyglutamine tract causes spinal bulbar muscular atrophy (Kennedy disease). Mutations are also associated with complete androgen insensitivity (CAIS). PIAS1 and PIASxalpha function as SUMO-E3 ligases toward androgen receptor; sumoylation of ANDR represses androgen receptor dependent transcription.

# Androgen Receptor (ANDR) Antibody - References

Nishida, et al. J. Biol. Chem. 277 (44), 41311-41317 (2002) Sills, E.S., et al., Int. J. Mol. Med. 9(1):45-48 (2002).



Chavez, B., et al., J. Hum. Genet. 46(10):560-565 (2001). Ahmed, S.F., et al., J. Clin. Endocrinol. Metab. 85(2):658-665 (2000). Marcelli, M., et al., Cancer Res. 60(4):944-949 (2000).