

**Androgen Receptor Protein Antibody**  
**Mouse Monoclonal Antibody (Mab)**  
**Catalog # AM2145b****Specification**

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**Androgen Receptor Protein Antibody - Product Information**

Application	WB,E
Primary Accession	<a href="#">P10275</a>
Other Accession	<a href="#">NP_000035.2</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgA
Calculated MW	99188

**Androgen Receptor Protein 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**

Purified His-tagged Androgen Receptor Protein(Fragment) was used to produced this monoclonal antibody.

**Dilution**

WB~~1:500~1000

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**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 Protein Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Androgen Receptor Protein 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:[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

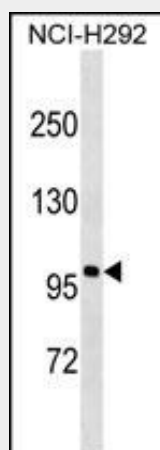
[Isoform 2]: Mainly expressed in heart and skeletal muscle.

### Androgen Receptor Protein 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](#)

### Androgen Receptor Protein Antibody - Images



Androgen Receptor Protein(Cat. #AM2145b) western blot analysis in NCI-H292 cell line lysates (35µg/lane).This demonstrates the AR antibody detected the AR protein (arrow).

### Androgen Receptor Protein Antibody - 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].

#### **Androgen Receptor Protein Antibody - 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) :