

**AR Antibody (Center) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP13058c****Specification**

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**AR Antibody (Center) Blocking peptide - Product Information**Primary Accession [P10275](#)**AR Antibody (Center) Blocking peptide - Additional Information****Gene ID** 367**Other Names**

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

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**AR Antibody (Center) Blocking peptide - 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.

**AR Antibody (Center) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

**AR Antibody (Center) Blocking peptide - Images****AR Antibody (Center) Blocking peptide - 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) Blocking peptide - 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) :