

Androgen Receptor (ANDR) Antibody Blocking peptide
Synthetic peptide
Catalog # BP2509a**Specification**

Androgen Receptor (ANDR) Antibody Blocking peptide - Product InformationPrimary Accession [P10275](#)
Other Accession [Q5JUN9](#)**Androgen Receptor (ANDR) Antibody Blocking peptide - Additional Information**

Gene ID 367

Other Names

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

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP2509a](/product/products/AP2509a) is HPHAR**IKLE**NPLD, containing a predicted sumoylation site from the central region of human ANDR. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

Androgen Receptor (ANDR) Antibody 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:[19022849](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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 (ANDR) Antibody Blocking peptide - Protocols

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

- [Blocking Peptides](#)

Androgen Receptor (ANDR) Antibody Blocking peptide - Images

Androgen Receptor (ANDR) Antibody Blocking peptide - 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 Blocking peptide - 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).