# ARG66478
# anti-Androgen Receptor antibody

Package: 100 µl
Store at: -20°C

## Summary

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|---|---|
| Product Description | Mouse Monoclonal antibody recognizes Androgen Receptor |
| Tested Reactivity | Hu |
| Tested Application | IHC-P, WB |
| Host | Mouse |
| Clonality | Monoclonal |
| Isotype | IgG2b, kappa |
| Target Name | Androgen Receptor |
| Species | Human |
| Immunogen | Synthetic peptide derived from Human Androgen Receptor. |
| Conjugation | Un-conjugated |
| Alternate Names | TFM; Dihydrotestosterone receptor; Androgen receptor; KD; AR8; HUMARA; NR3C4; AIS; SBMA; HYSP1; SMAX1; Nuclear receptor subfamily 3 group C member 4; DHTR |

## Application Instructions

Application table

| Application | Dilution |
|---|---|
| IHC-P | 1:100 - 1:500 |
| WB | 1:500 - 1:2000 |

Application Note: IHC-P: Antigen Retrieval: Tris/EDTA buffer (pH 8.0) was used.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Observed Size: ~ 115 kDa

## Properties

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| Form | Liquid |
| Purification | Affinity purification with immunogen. |
| Buffer | PBS, 0.02% Sodium azide, 50% Glycerol and 0.5% BSA. |
| Preservative | 0.02% Sodium azide |
| Stabilizer | 50% Glycerol and 0.5% BSA |
| Concentration | 1 mg/ml |
| Storage instruction | For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use. |

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| Note | For laboratory research only, not for drug, diagnostic or other use. |

## Bioinformation

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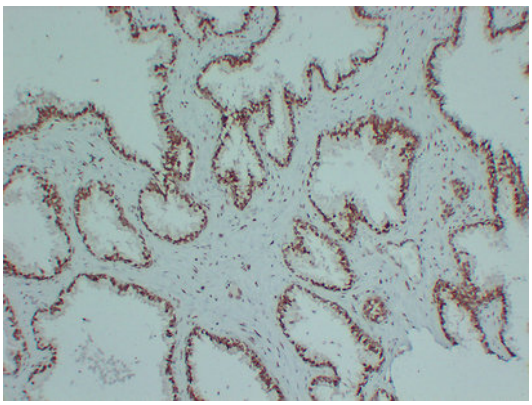
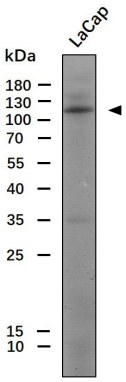
| Gene Symbol | AR |
| Gene Full Name | androgen receptor |
| Background | Androgen Receptor is a protein that has 3 major functional domains: the N-terminal domain, DNA-binding domain, and androgen-binding domain. The protein functions as a steroid-hormone activated transcription factor. Upon binding 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 from the normal 9-34 repeats to the pathogenic 38-62 repeats causes spinal bulbar muscular atrophy (SBMA, also known as Kennedy's disease). Mutations in this gene are also associated with complete androgen insensitivity (CAIS). Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jan 2017] |
| Function | Androgen Receptors are ligand-activated transcription factors that regulate eukaryotic gene expression and affect cellular proliferation and differentiation in target tissues. 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.<br><br>Isoform 3 and isoform 4 lack the C-terminal ligand-binding domain and may therefore constitutively activate the transcription of a specific set of genes independently of steroid hormones. [UniProt] |
| Calculated Mw | 99 kDa |
| PTM | Sumoylated on Lys-388 (major) and Lys-521. Ubiquitinated. Deubiquitinated by USP26. 'Lys-6' and 'Lys-27'-linked polyubiquitination by RNF6 modulates AR transcriptional activity and specificity.<br><br>Phosphorylated in prostate cancer cells in response to several growth factors including EGF. Phosphorylation is induced by c-Src kinase (CSK). Tyr-535 is one of the major phosphorylation sites and an increase in phosphorylation and Src kinase activity is associated with prostate cancer progression. Phosphorylation by TNK2 enhances the DNA-binding and transcriptional activity and may be responsible for androgen-independent progression of prostate cancer. Phosphorylation at Ser-83 by CDK9 regulates AR promoter selectivity and cell growth. Phosphorylation by PAK6 leads to AR-mediated transcription inhibition.<br><br>Palmitoylated by ZDHHC7 and ZDHHC21. Palmitoylation is required for plasma membrane targeting and for rapid intracellular signaling via ERK and AKT kinases and cAMP generation. [UniProt] |
| Cellular Localization | 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. [UniProt] |

## Images



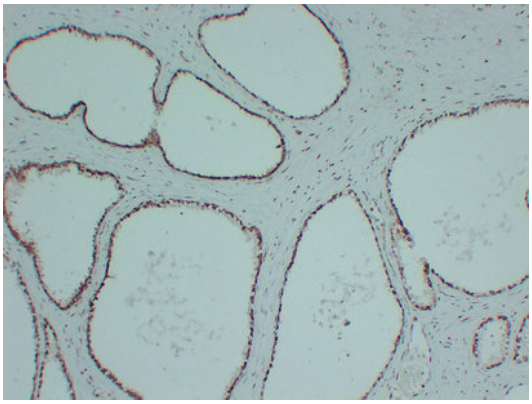
ARG66478 anti-Androgen Receptor antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human prostate stained with ARG66478 anti-Androgen Receptor antibody at 1:200 (4°C, overnight). Antigen Retrieval: Tris/EDTA buffer (pH 8.0) was used.



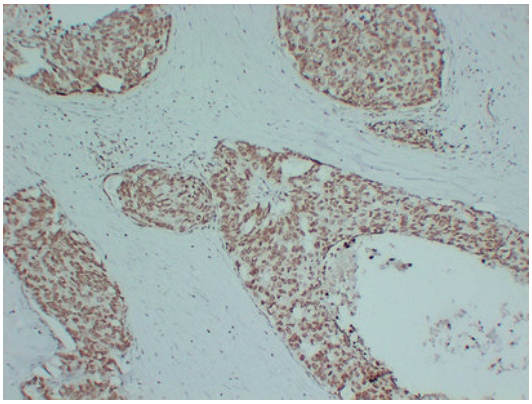

ARG66478 anti-Androgen Receptor antibody WB image

Western blot: 30 µg of LaCap whole cell lysate stained with ARG66478 anti-Androgen Receptor antibody at 1:1000 dilution.



ARG66478 anti-Androgen Receptor antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human prostate stained with ARG66478 anti-Androgen Receptor antibody at 1:200 (4°C, overnight). Antigen Retrieval: Tris/EDTA buffer (pH 8.0) was used.



ARG66478 anti-Androgen Receptor antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human prostatic carcinoma stained with ARG66478 anti-Androgen Receptor antibody at 1:200 (4°C, overnight). Antigen Retrieval: Tris/EDTA buffer (pH 8.0) was used.