

Product datasheet

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ARG66818 Package: 100 µl store at: -20°C Store at: -20°C

Summary

Product Description Recombinant Rabbit Monoclonal antibody [SQab20230] recognizes Androgen Receptor (AR-V7 specific)

Tested Reactivity Hu

Tested Application IHC-P

Host Rabbit

Clonality Monoclonal
Clone SQab20230

Isotype IgG

Target Name Androgen Receptor (AR-V7 specific)

Species Human

Immunogen Synthetic peptide within aa. 600 to the C-terminus of Human Androgen Receptor (AR-V7 specific).

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 - 1:200
Application Note	IHC-P: Antigen Retrieval: Heat mediation was performed in Tris/EDTA buffer (pH 9.0), primary antibody incubate at RT (18°C - 25°C) for 30 minutes. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form Liquid

Purification Purification with Protein A.

Buffer PBS, 0.01% Sodium azide, 40% Glycerol and 0.05% BSA.

Preservative 0.01% Sodium azide

Stabilizer 40% Glycerol and 0.05% BSA

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.

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

Bioinformation

Gene Symbol

AR

Gene Full Name

androgen receptor

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 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

Steroid hormone 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 NROB2. Activated, but not phosphorylated, by HIPK3 and ZIPK/DAPK3.

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

ртм

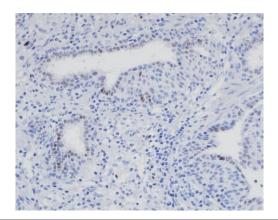
Sumoylated on Lys-388 (major) and Lys-521. Ubiquitinated. Deubiquitinated by USP26. 'Lys-6' and 'Lys-27'-linked polyubiquitination by RNF6 modulates AR transcriptional activity and specificity.

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.

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]



ARG66818 anti-Androgen Receptor (AR-V7 specific) antibody [SQab20230] IHC-P image

Immunohistochemistry: Formalin/PFA-fixed and paraffin-embedded Human prostate adenocarcinoma tissue. Antigen Retrieval: Heat mediation was performed in Tris/EDTA buffer (pH 9.0). The tissue section was stained with ARG66818 anti-Androgen Receptor (AR-V7 specific) antibody [SQab20230].