

## Product datasheet

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# ARG66207 anti-Androgen Receptor antibody [SQab1729]

Package: 100 μl, 50 μl Store at: -20°C

#### **Summary**

Product Description Recombinant Rabbit Monoclonal antibody [SQab1729] recognizes Androgen Receptor

Tested Reactivity Hu, Ms, Rat

Tested Application IHC-P, WB

Host Rabbit

Clonality Monoclonal
Clone SQab1729

Isotype IgG

Target Name Androgen Receptor

Species Human

Immunogen Synthetic peptide around the N-terminus of 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 - 1:200
	WB	1:2000 - 1:5000
Application Note	IHC-P: Antigen retrieval: Heat mediated was performed using Tris/EDTA buffer pH 9.0  * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	100 kDa	

### **Properties**

Form Liquid

Purification Affinity purification with immunogen.

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.

#### Bioinformation

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 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]

Highlight

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Androgen Receptor antibodies:

Related news:

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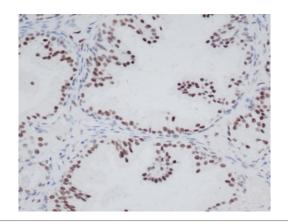
Calculated Mw

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. 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.

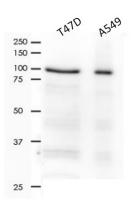
Palmitoylated by ZDHHC7 and ZDHHC21. Palmitoylation is required for plasma membrane targeting and for rapid intracellular signaling via ERK and AKT kinases and cAMP generation.



# ARG66207 anti-Androgen Receptor antibody [SQab1729] IHC-P image

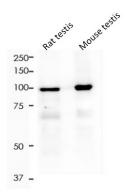
Immunohistochemistry: Formalin-fixed and paraffin-embedded Human prostate tissue stained with ARG66207 anti-Androgen Receptor antibody [SQab1729] at 1:200 dilution.

Antigen retrieval: Heat mediated was performed using Tris/EDTA buffer pH  $9.0\,$ 



#### ARG66207 anti-Androgen Receptor antibody [SQab1729] WB image

Western blot: 10  $\mu g$  of T47D and A549 cell lysates stained with ARG66207 anti-Androgen Receptor antibody [SQab1729] at 1:2000 dilution.



#### ARG66207 anti-Androgen Receptor antibody [SQab1729] WB image

Western blot: 10  $\mu g$  of Rat testis and Mouse testis lysates stained with ARG66207 anti-Androgen Receptor antibody [SQab1729] at 1:5000 dilution.