

ARG63608 anti-Androgen Receptor antibody - ChIP-Grade

Package: 100 µg
Store at: -20°C

Summary

Product Description	Goat Polyclonal antibody recognizes Androgen Receptor - ChIP-Grade
Tested Reactivity	Hu
Predict Reactivity	Ms, Rat, Cow, Dog, Pig
Tested Application	ChIP, ICC/IF, IHC-P, WB
Specificity	This antibody is expected to recognize isoform 1 (NP_000035.2) only.
Host	Goat
Clonality	Polyclonal
Isotype	IgG
Target Name	Androgen Receptor
Species	Human
Immunogen	EVQLGLGRVYPRPPSC
Conjugation	Un-conjugated
Alternate Names	TFM; Dihydrotestosterone receptor; Androgen receptor; KD; AR8; HUMARA; NR3C4; AIS; SBMA; HYPSP1; SMAX1; Nuclear receptor subfamily 3 group C member 4; DHTR

Application Instructions

Application table	Application	Dilution
	ChIP	Assay - dependent
	ICC/IF	10 µg/ml
	IHC-P	2 - 3 µg/ml
	WB	0.1 - 0.5 µg/ml
Application Note	IHC-P: Antigen Retrieval: Steam tissue section in Citrate buffer (pH 6.0). WB: Recommend incubate at RT for 1h. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	~ 95 kDa	

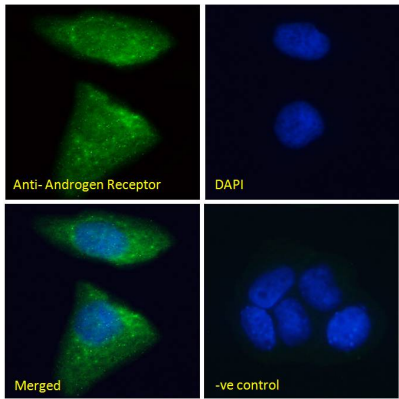
Properties

Form	Liquid
Purification	Purified from goat serum by antigen affinity chromatography.
Buffer	Tris saline (pH 7.3), 0.02% Sodium azide and 0.5% BSA.
Preservative	0.02% Sodium azide

Stabilizer	0.5% BSA
Concentration	0.5 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 or below. 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.

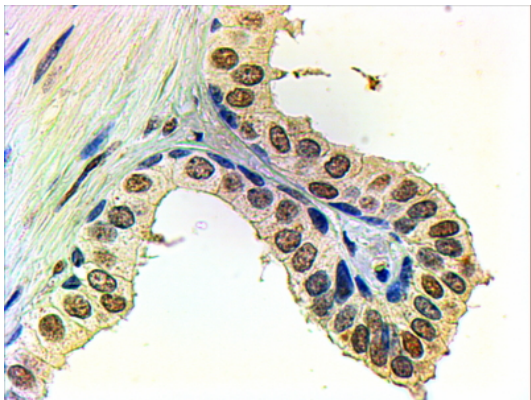
Bioinformation

Database links	GeneID: 367 Human Swiss-port # P10275 Human
Gene Symbol	AR
Gene Full Name	androgen receptor
Background	<p>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]</p>
Function	<p>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.</p> <p>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]</p>
Research Area	Cancer antibody; Developmental Biology antibody; Gene Regulation antibody; Signaling Transduction antibody
Calculated Mw	99 kDa
PTM	<p>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.</p> <p>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.</p>



ARG63608 anti-Androgen Receptor antibody - ChIP-Grade ICC/IF image

Immunofluorescence: Paraformaldehyde fixed MCF7 cells permeabilized with 0.15% Triton. Cells were stained with ARG63608 anti-Androgen Receptor antibody - ChIP-Grade (green) at 10 µg/ml dilution for 1 hour. DAPI (blue) for nuclear staining. Negative control: Unimmunized goat IgG (green) at 10 µg/ml dilution.



ARG63608 anti-Androgen Receptor antibody - ChIP-Grade IHC-P image

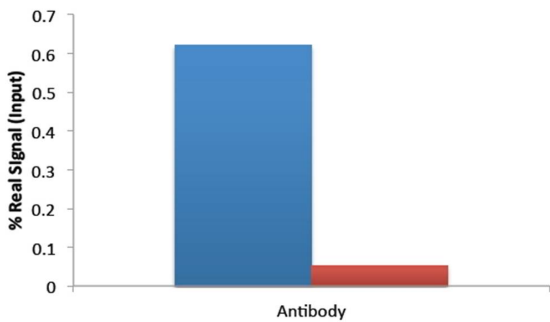
Immunohistochemistry: Paraffin-embedded Human prostate tissue. Antigen Retrieval: Steam tissue section in Citrate buffer (pH 6.0). The tissue section was stained with ARG63608 anti-Androgen Receptor antibody (ChIP-Grade) at 2 µg/ml dilution followed by AP-staining.

This picture shows nuclear staining in the secretory cells of the gland.



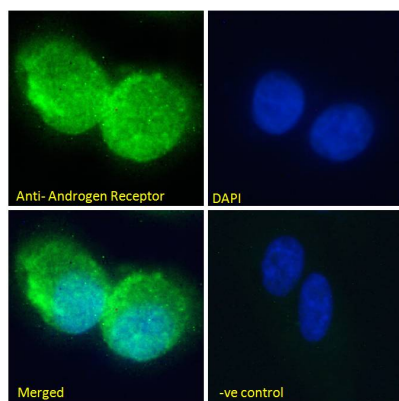
ARG63608 anti-Androgen Receptor antibody - ChIP-Grade WB image

Western blot: 35 µg of Human cerebellum (A) and Human pancreas (B, negative control) lysates (in RIPA buffer) stained with ARG63608 anti-Androgen Receptor antibody - ChIP-Grade at 0.5 µg/ml (A) and 0.1 µg/ml (B) dilutions and incubated at RT for 1 hour.



ARG63608 anti-Androgen Receptor antibody - ChIP-Grade ChIP image

ChIP: 2 µg ARG63608 anti-Androgen Receptor antibody (ChIP-Grade) with 1 µg DHT-treated HEC50 chromatin using the Chromatrap® spin column sonication kit (Protein G) measuring FKBP5 enrichment.



ARG63608 anti-Androgen Receptor antibody - ChIP-Grade ICC/IF image

Immunofluorescence: Paraformaldehyde fixed U2OS cells permeabilized with 0.15% Triton. Cells were stained with ARG63608 anti-Androgen Receptor antibody - ChIP-Grade (green) at 10 µg/ml dilution for 1 hour. DAPI (blue) for nuclear staining. Negative control: Unimmunized goat IgG (green) at 10 µg/ml dilution.