ARG56040
anti-Androgen Receptor antibody [AR441]

Package: 50 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [AR441] recognizes Androgen Receptor
Tested Reactivity	Hu
Species Does Not React With	Ms
Tested Application	FACS, ICC/IF, IHC-P
Host	Mouse
Clonality	Monoclonal
Clone	AR441
Isotype	IgG1, kappa
Target Name	Androgen Receptor
Species	Human
Immunogen	Synthetic peptide around aa. 299-315 of Human Androgen Receptor. (STEDTAEYSPFKGGYTK)
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
FACS	0.5 - 1 µg/10^6 cells in 0.1ml
ICC/IF	0.5 - 1 µg/ml
IHC-P	0.5 - 1 µg/ml

Application Note

Antigen retrieval for IHC-P: Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 10-20 min followed by cooling at RT for 20 min.

* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

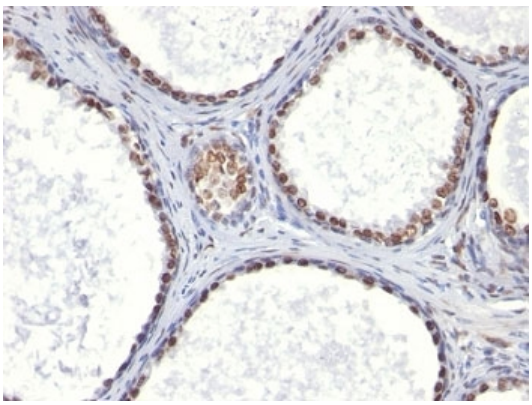
Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS (pH 7.4), 0.05% Sodium azide and 0.1 mg/ml BSA
Preservative	0.05% Sodium azide
Stabilizer	0.1 mg/ml BSA

Concentration	0.2 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	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. 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. 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.
Cellular Localization	Nuclear

Images



ARG56040 anti-Androgen Receptor antibody [AR441] IHC-P image

Immunohistochemistry: Formalin-fixed, paraffin-embedded Human prostate carcinoma stained with ARG56040 anti-Androgen Receptor antibody [AR441].