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Androgen receptor Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1360a

Product Information

Application	WB, IHC, E
Primary Accession	P10275
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	2H8
Isotype	IgG1
Calculated MW	99188
Description	The androgen receptor (AR), also known as NR3C4 (nuclear receptor subfamily 3, group C, member 4), is a type of nuclear receptor which is activated by binding of either of the androgenic hormones testosterone or dihydrotestosterone in the cytoplasm and then translocating into the nucleus. The androgen receptor is most closely related to the progesterone receptor, and progestins in higher dosages can block the androgen receptor. The main function of the androgen receptor is as a DNA binding transcription factor which regulates gene expression; however, the androgen receptor has other functions as well. Androgen regulated genes are critical for the development and maintenance of the male sexual phenotype.
Immunogen	Purified recombinant fragment of human AR expressed in E. Coli.
Formulation	Ascitic fluid containing 0.03% sodium azide.

Additional Information

Gene ID	367
Other Names	Androgen receptor, Dihydrotestosterone receptor, Nuclear receptor subfamily 3 group C member 4, AR, DHTR, NR3C4
Dilution	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 E~~N/A
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Androgen receptor Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	AR
Synonyms	DHTR, NR3C4
Function	Steroid hormone receptors are ligand-activated transcription factors that regulate eukaryotic gene expression and affect cellular proliferation and differentiation in target tissues (PubMed:19022849). 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.
Cellular Location	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.
Tissue Location	[Isoform 2]: Mainly expressed in heart and skeletal muscle.

References

1. Chin Med J (Engl). 2009 Nov 20;122(22):2779-83. 2. Taiwan J Obstet Gynecol. 2009 Sep;48(3):262-7. 3. Prostate. 2008 Mar 1;68(4):453-61. 4. Cancer Res. 2007 May 15;67(10):4630-7.

Images

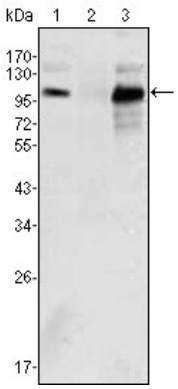


Figure 1: Western blot analysis using Androgen receptor mouse mAb against K562 (1), Jurkat (2) and LNCaP (3) cell lysate.

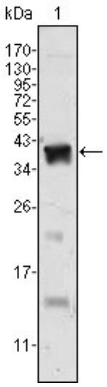
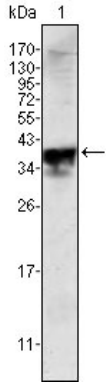


Figure 2: Western blot analysis using Androgen receptor mAb against human Androgen receptor (AA: 221-321) recombinant protein. (Expected MW is 40 kDa)

Figure 3: Western blot analysis using Androgen receptor mouse mAb against Androgen receptor (aa221-321)-hIgGFc transfected HEK293 cell lysate.



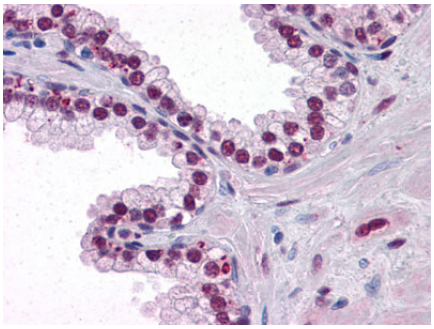


Figure 4: Immunohistochemical analysis of paraffin-embedded human Prostate tissues using Androgen receptor mouse mAb

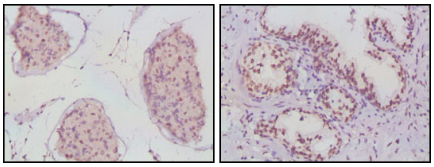


Figure 5: Immunohistochemical analysis of paraffin-embedded human human testis (left) and prostate cancer (right) tissues using Androgen Receptor mouse mAb with DAB staining.