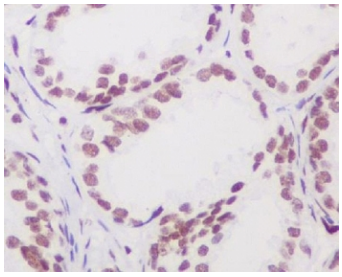
Androgen Receptor Antibody CDF-1 / Steroid Hormone Receptor Antibody [clone CDF-1] (RQ5318)

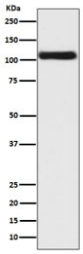
Catalog No.	Formulation	Size
RQ5318	Antibody in PBS with 0.02% sodium azide, 50% glycerol and 0.4-0.5mg/ml BSA	100 ul

Bulk quote request

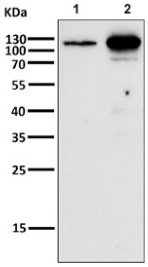
Species Reactivity	Human, Mouse, Rat
Format	Purified
Host	Rabbit
Clonality	Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	CDF-1
Purity	Affinity purified
UniProt	P10275
Localization	Cytoplasmic, nuclear
Applications	Western blot: 1:500-1:2000 Immunohistochemistry (FFPE): 1:50-1:200 Immunofluorescence: 1:50-1:200
Limitations	This Androgen Receptor Antibody CDF-1 / Steroid Hormone Receptor Antibody is available for research use only.



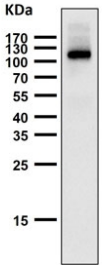
Androgen Receptor Antibody CDF-1 in Human Prostate IHC. Immunohistochemistry testing of clone CDF-1 in FFPE human prostate tissue shows distinct nuclear androgen receptor staining in glandular epithelial cells, consistent with the function of AR as a steroid hormone-regulated nuclear transcription factor.



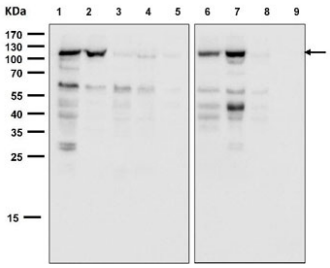
Androgen Receptor Antibody CDF-1 in Human LNCaP Prostate Cancer Cells WB. Western blot testing of clone CDF-1 in human LNCaP prostate cancer cell lysate. A strong, discrete androgen receptor band is observed at approximately 100 kDa, consistent with the predicted molecular weight of AR.



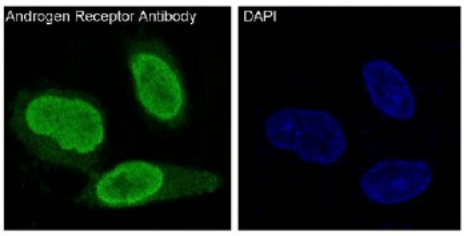
Androgen Receptor Antibody CDF-1 in Human A375 and MCF7 Cancer Cells WB. Western blot testing of clone CDF-1 in 1) human A375 melanoma and 2) human MCF7 breast cancer cell lysates. Androgen receptor is detected at approximately 110-120 kDa in both samples, with substantially stronger signal in MCF7 cells. A weaker lower-molecular-weight band is also visible in the MCF7 lysate.



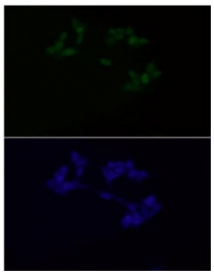
Androgen Receptor Antibody CDF-1 in Mouse Skin WB. Western blot testing of clone CDF-1 in mouse skin tissue lysate. A strong, discrete androgen receptor band is observed at approximately 110 kDa, demonstrating detection of mouse AR.



Androgen Receptor Antibody CDF-1 in Mouse and Rat Reproductive Tissues WB. Western blot testing of clone CDF-1 in 1) mouse ovary, 2) mouse testis, 3) mouse uterus, 4) mouse prostate, 5) mouse seminal vesicle, 6) rat ovary, 7) rat testis, 8) rat uterus and 9) rat prostate tissue lysates. Androgen receptor is detected at approximately 100-110 kDa, with particularly strong bands in mouse ovary, mouse testis and rat ovary. Additional lower-molecular-weight immunoreactive bands are present in several samples.



Androgen Receptor Antibody CDF-1 in Human MCF7 Breast Cancer Cells IF. Immunofluorescence testing of clone CDF-1 in human MCF7 breast cancer cells shows strong androgen receptor immunoreactivity (green), with prominent nuclear staining and additional cytoplasmic signal. Nuclei are counterstained with DAPI (blue).



Androgen Receptor Antibody CDF-1 in Human LNCaP Prostate Cancer Cells IF. Immunofluorescence testing of clone CDF-1 in human LNCaP prostate cancer cells shows androgen receptor immunoreactivity (green), with DAPI nuclear counterstaining shown in blue.

Description

Androgen Receptor Antibody CDF-1 / Steroid Hormone Receptor Antibody recognizes androgen receptor, a ligand-

activated nuclear receptor and transcription factor encoded by the AR gene. Also designated NR3C4, androgen receptor belongs to the steroid hormone receptor family and mediates cellular responses to androgens including testosterone and dihydrotestosterone. The receptor contains a large N-terminal transcriptional activation domain, a central DNA-binding domain, a hinge region and a C-terminal ligand-binding domain. These functional regions coordinate hormone recognition, receptor localization, DNA binding and transcriptional regulation.

In the absence of ligand, androgen receptor is associated with regulatory proteins in the cytoplasm and nucleus. Androgen binding induces conformational changes that promote receptor activation, dimerization and interaction with androgen response elements in target genes. AR subsequently recruits transcriptional coregulators and influences gene programs governing development, differentiation, metabolism, proliferation and survival. Because it directly couples steroid hormone signaling to transcriptional control, AR is an important model for studying nuclear receptor biology and hormone-regulated gene expression.

Androgen receptor signaling is especially important in male reproductive development and normal prostate physiology. AR also has a central role in prostate cancer, where continued receptor signaling can support tumor growth and progression. Alterations in AR expression, amplification, mutation and alternative splicing are therefore extensively investigated in models of androgen-dependent disease and treatment resistance. AR biology is also relevant beyond the prostate, including studies of breast cancer, reproductive tissues, muscle, skin and neurological disorders. Expansion of the polyglutamine tract within the AR N-terminal region causes spinal and bulbar muscular atrophy, also known as Kennedy disease, while other pathogenic AR variants can cause androgen insensitivity syndromes.

Clone CDF-1 is a rabbit monoclonal antibody generated against a synthetic peptide specific to human androgen receptor. It recognizes human, mouse and rat AR and has been evaluated by Western blot, immunohistochemistry and immunofluorescence. Current validation includes androgen-responsive human cell models and multiple reproductive tissues from mouse and rat, providing useful cross-species data for studies of receptor expression and localization.

NSJ Bioreagents provides this Androgen Receptor Antibody for research into nuclear receptor signaling, androgen-responsive transcription, reproductive biology and cancer. A Steroid Hormone Receptor Antibody directed against AR can support investigation of hormone-dependent transcription and the cellular pathways controlled by androgen signaling.

Explore our Transcription Factor Antibodies page for additional reagents targeting DNA-binding proteins that regulate gene expression, cellular differentiation and signal-responsive transcription.

Application Notes

Optimal dilution of the Androgen Receptor Antibody CDF-1 / Steroid Hormone Receptor Antibody should be determined by the researcher.

Immunogen

A synthetic peptide specific to human Androgen Receptor was used as the immunogen for the Androgen Receptor antibody.

Storage

Store the Androgen Receptor antibody at -20oC.

Alternate Names

Androgen Receptor antibody, AR antibody, NR3C4 antibody, Nuclear Receptor Subfamily 3 Group C Member 4 antibody, Dihydrotestosterone Receptor antibody

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