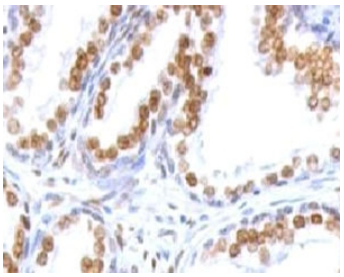
# AR Antibody for IHC / Androgen Receptor Immunohistochemistry Antibody [clone ANDRC-1] (V7101)

| Catalog No. | Formulation | Size |
|---|---|---|
| V7101-100UG | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide | 100 ug |
| V7101-20UG | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide | 20 ug |
| V7101SAF-100UG | 1 mg/ml in 1X PBS; BSA free, sodium azide free | 100 ug |
| V7101IHC-7ML | Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only* | 7 ml |

## Bulk quote request

| | |
|---|---|
| **Availability** | 1-3 business days |
| **Species Reactivity** | Human |
| **Format** | Purified |
| **Host** | Mouse |
| **Clonality** | Monoclonal (mouse origin) |
| **Isotype** | Mouse IgG1, kappa |
| **Clone Name** | ANDRC-1 |
| **Purity** | Protein G affinity chromatography |
| **UniProt** | P10275 |
| **Localization** | Nuclear |
| **Applications** | Immunohistochemistry (FFPE): 0.5-1ug/ml for 30 min at RT (1)<br>Prediluted IHC only format: incubate for 30 min at RT (2) |
| **Limitations** | This Androgen Receptor/AR antibody is available for research use only. |



AR Antibody for IHC (clone ANDRC-1) immunohistochemistry of human prostate carcinoma. Formalin-fixed, paraffin-embedded human prostate carcinoma tissue stained with the mouse monoclonal AR Antibody for IHC (clone ANDRC-1) shows strong nuclear HRP-DAB brown chromogenic staining in malignant glandular epithelial cells, consistent with androgen receptor expression and the expected nuclear localization of this ligand-activated steroid hormone receptor. Surrounding stromal elements display minimal staining, highlighting the predominance of AR-positive tumor epithelial nuclei within the carcinoma tissue.

## Description

Androgen receptor (AR), encoded by the AR gene and also known as nuclear receptor subfamily 3 group C member 4 (NR3C4), is a ligand-activated transcription factor that mediates cellular responses to androgens including testosterone and dihydrotestosterone. AR functions as a steroid hormone receptor that regulates transcription of androgen-responsive genes controlling cellular differentiation, proliferation, and hormone signaling in multiple tissues. AR Antibody for IHC (clone ANDRC-1) is designed for immunohistochemistry-based detection of androgen receptor protein in formalin-fixed, paraffin-embedded tissue sections, enabling visualization of AR-positive cells within tissue architecture.

Immunohistochemistry analysis of androgen receptor typically demonstrates a strong nuclear staining pattern reflecting the transcriptional function of AR following ligand binding and nuclear translocation. AR Antibody for IHC (clone ANDRC-1) is optimized for detecting this nuclear localization in FFPE tissues, allowing researchers and pathologists to evaluate AR expression directly within histological sections. Nuclear chromogenic staining in epithelial cells is characteristic of AR-positive tissues and provides a clear morphological context for androgen receptor distribution.

AR expression is most prominent in androgen-responsive tissues, particularly within the prostate gland where androgen receptor signaling controls epithelial differentiation, secretory function, and tissue homeostasis. Immunohistochemistry detection of AR commonly reveals intense nuclear staining in prostate glandular epithelial cells, while surrounding stromal elements may show lower or variable expression. This epithelial nuclear staining pattern is a hallmark feature used in histological studies of androgen receptor biology.

Immunohistochemical analysis of AR is also widely used in cancer research, particularly in studies of prostate carcinoma where androgen receptor signaling plays a central role in tumor growth and progression. Visualization of AR-positive tumor cell nuclei allows investigators to evaluate androgen receptor expression in malignant epithelial populations while maintaining the architectural context of the tumor tissue. AR Antibody for IHC (clone ANDRC-1) supports these investigations by enabling clear nuclear staining of AR within tissue sections.

The androgen receptor protein contains multiple functional domains including an N-terminal transactivation domain, a DNA-binding domain that recognizes androgen response elements, and a ligand-binding domain responsible for androgen interaction. These domains coordinate ligand-dependent transcriptional activation of genes involved in hormone-responsive cellular pathways. Antibodies capable of detecting AR in tissue sections allow researchers to examine receptor localization and distribution in physiologic and disease contexts.

AR Antibody for IHC (clone ANDRC-1) is a mouse monoclonal antibody developed for immunohistochemistry applications targeting androgen receptor protein. Detection of AR using this antibody enables visualization of androgen receptor-positive nuclei within tissue sections, supporting studies of androgen signaling, prostate tissue biology, and hormone-responsive tumor research.

For additional information on androgen receptor biology and complementary antibody validation, visit our Androgen Receptor Antibody CDF-1 / Steroid Hormone Receptor Antibody page.

## Application Notes

Optimal dilution of the AR Antibody for IHC should be determined by the researcher.

1. 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.
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

## Immunogen

Recombinant full-length human AR protein was used as the immunogen for the Androgen Receptor/AR antibody.

## Storage

Store the Androgen Receptor/AR antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

## Alternate Names

Androgen receptor antibody, AR nuclear receptor antibody, NR3C4 antibody, Androgen receptor transcription factor antibody


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