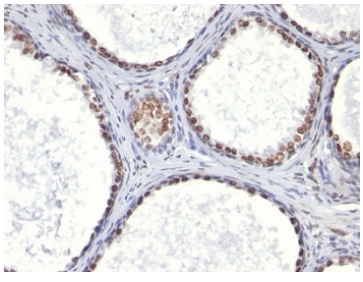
AR Antibody / Androgen Receptor [clone AR441] (V2638)

Catalog No.	Formulation	Size
V2638-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2638-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2638SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2638IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

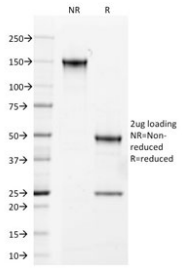
Citations (11)

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	AR441
Purity	Protein G affinity chromatography
UniProt	P10275
Localization	Nuclear
Applications	Flow Cytometry : 0.5-1ug/10^6 cells Immunofluorescence : 0.5-1ug/ml Immunohistochemistry (FFPE) : 0.5-1ug/ml for 30 min at RT
Limitations	This AR antibody is available for research use only.



IHC: Formalin-fixed, paraffin-embedded human prostate carcinoma stained with AR antibody (AR441).



SDS-PAGE analysis of purified, BSA-free AR antibody (clone AR441) as confirmation of integrity and purity.

Description

AR antibody clone AR441 is a monoclonal antibody specific for androgen receptor, a nuclear receptor that functions as a ligand-activated transcription factor. Androgen receptor mediates the effects of androgens such as testosterone and dihydrotestosterone, regulating genes involved in male reproductive development, muscle physiology, and metabolic processes. Dysregulation of androgen receptor signaling plays a central role in prostate cancer, androgen insensitivity syndromes, and certain metabolic diseases. NSJ Bioreagents supplies AR antibody clone AR441 for oncology, endocrinology, and molecular biology research.

The antibody produces strong nuclear staining in androgen-sensitive tissues, including prostate, testis, and skeletal muscle. In pathology, it is commonly applied to confirm androgen receptor expression in prostate tumors, where receptor signaling drives tumor progression. Detection of androgen receptor with this antibody supports diagnostic evaluation and research into therapeutic strategies.

In oncology, AR antibody clone AR441 has been used extensively in prostate cancer research, including studies of castration-resistant disease. The antibody allows investigators to track receptor localization, expression levels, and changes in receptor signaling that contribute to resistance to androgen deprivation therapies.

In endocrinology, the antibody supports research into androgen signaling in reproductive development and endocrine disorders. It has been applied in studies of androgen insensitivity syndromes, where mutations in the androgen receptor gene disrupt receptor function despite normal hormone levels.

Beyond reproduction and cancer, the antibody has been employed in muscle biology and metabolism studies. Androgen receptor regulates muscle mass and energy balance, and its detection is important in exploring anabolic pathways and age-related muscle loss.

Validated across tissue and cell-based systems, AR antibody clone AR441 consistently provides strong nuclear signals with minimal background. Alternate names include androgen receptor antibody, nuclear receptor subfamily 3 group C member 4 antibody, and NR3C4 antibody.

Application Notes

Optimal dilution of the AR antibody 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

Amino acids 302-318 (STEDTAEYSPFKGGYTK) from human Androgen Receptor were used as the immunogen for the

AR antibody.

Storage

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