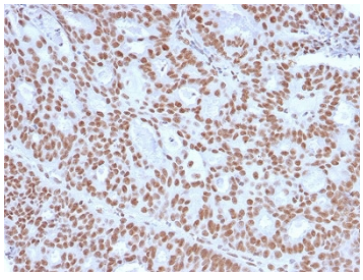
Progesterone Receptor Antibody - Protein Microarray Validated [clone PGR/2694] (V7319)

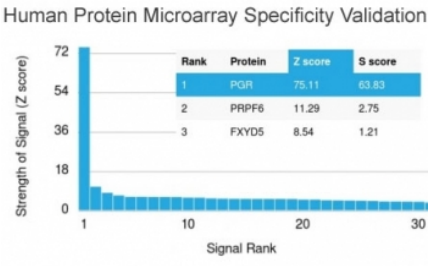
Catalog No.	Formulation	Size
V7319-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7319-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7319SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V7319IHC-7ML	Prediluted 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

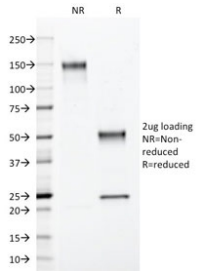
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	PGR/2694
Purity	Protein G affinity chromatography
UniProt	P06401
Localization	Nuclear, cytoplasmic
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This Progesterone Receptor antibody is available for research use only.



Progesterone Receptor Antibody IHC. Immunohistochemistry analysis of Progesterone Receptor Antibody - Protein Microarray Validated clone PGR/2694 in human endometrial carcinoma tissue. FFPE human endometrial carcinoma tissue was stained with the mouse monoclonal Progesterone Receptor antibody (clone PGR/2694) following heat induced epitope retrieval by boiling sections in pH6 10mM citrate buffer for 10-20 minutes. HRP-DAB brown chromogenic signal reveals strong nuclear staining in tumor epithelial cells, consistent with the known nuclear localization of Progesterone receptor (PGR) in hormone-responsive endometrial carcinoma cells.



Progesterone Receptor Antibody - Protein Microarray Validated specificity analysis using HuProt protein microarray. HuProt(TM) microarray containing more than 19,000 full-length human proteins was probed with Progesterone Receptor Antibody - Protein Microarray Validated (clone PGR/2694). The antibody shows the strongest signal for the intended target Progesterone receptor (PGR), demonstrating high target specificity compared with other proteins on the array. Z-score values represent the signal strength produced when the antibody binds a protein on the HuProt(TM) array, expressed as standard deviations above the mean signal across the array. The S-score represents the difference between consecutive Z-scores when targets are ranked by signal intensity, providing a measure of relative antibody specificity for the intended target.



SDS-PAGE analysis of purified, BSA-free Progesterone Receptor antibody (clone PGR/2694) as confirmation of integrity and purity.

Description

Progesterone receptor (PGR) is a ligand-activated nuclear hormone receptor encoded by the PGR gene and functions as a transcription factor mediating cellular responses to progesterone signaling. Progesterone Receptor Antibody - Protein Microarray Validated targets this steroid hormone receptor, also known as Nuclear receptor subfamily 3 group C member 3 (NR3C3), a member of the nuclear receptor superfamily that regulates hormone-dependent transcriptional programs. Progesterone receptor is predominantly localized in the nucleus where progesterone binding activates transcriptional regulation of genes involved in reproductive biology and endocrine signaling.

Progesterone Receptor Antibody - Protein Microarray Validated (clone PGR/2694) recognizes the PGR protein and has been evaluated using protein microarray validation technology to assess antibody specificity. Protein microarray platforms enable antibodies to be screened against large panels of proteins simultaneously, helping identify selective binding to the intended target while minimizing potential cross-reactivity. This validation strategy provides additional confidence that the antibody recognizes Progesterone receptor with high specificity in experimental systems.

The PGR gene produces two major receptor isoforms known as PR-A and PR-B, which arise from alternative transcription start sites and differ in their N-terminal regulatory regions. These isoforms display distinct transcriptional activities and contribute differently to progesterone-dependent gene regulation. PR-B contains an additional activation domain that enhances transcriptional activation of progesterone-responsive genes, whereas PR-A can act as both a transcriptional activator and regulatory modulator of PR-B activity. Understanding the expression and regulation of these isoforms is important for studying progesterone signaling pathways.

Progesterone receptor signaling plays a central role in reproductive biology and endocrine regulation. Expression of PGR is commonly observed in hormone-responsive tissues including uterus, ovary, and mammary gland where progesterone signaling regulates ovulation, implantation, and mammary gland development. In addition, Progesterone receptor expression is frequently examined in breast cancer research and other hormone-responsive tumor models in which steroid hormone signaling influences cellular proliferation and tumor progression.

Progesterone Receptor Antibody - Protein Microarray Validated provides a research tool for investigating nuclear receptor biology and steroid hormone signaling pathways. Protein microarray validated antibodies help support reliable detection of target proteins, allowing researchers to study Progesterone receptor expression and regulation in experimental systems focused on endocrine signaling, transcriptional control, and hormone-responsive disease mechanisms.

HER2 is commonly evaluated alongside this marker in epithelial tumors and breast cancer research; see our HER2 antibody page. This antibody is part of a broader antibody panel offered by NSJ Bioreagents.

Application Notes

The optimal dilution of the Progesterone Receptor Antibody - Protein Microarray Validated for each application should be determined by the researcher.

1. 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

A portion of amino acids 483-571 from the human protein was used as the immunogen for this Progesterone Receptor antibody.

Storage

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

Alternate Names

PGR antibody, NR3C3 antibody, Progesterone receptor A antibody, Progesterone receptor B antibody, PR-A antibody

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