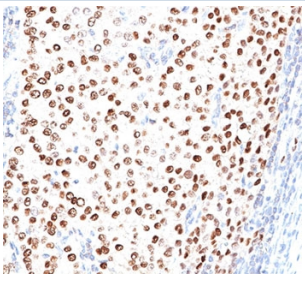
Progesterone Receptor Antibody Clone PR500 [clone PR500] (V2225)

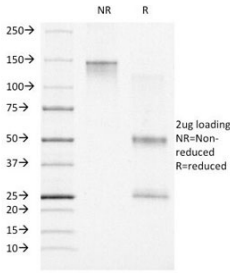
Catalog No.	Formulation	Size
V2225-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2225-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2225SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	PR500
Purity	Protein G affinity chromatography
Buffer	1X PBS, pH 7.4
Gene ID	5241 (Human)
Localization	Nuclear, cytoplasmic
Applications	Immunohistochemistry (FFPE): 0.5-1ug/ml
Limitations	This **Progesterone receptor antibody** is available for research use only.



Progesterone Receptor Antibody Clone PR500 immunohistochemistry analysis in human breast carcinoma. FFPE human breast carcinoma tissue was stained with the mouse monoclonal Progesterone Receptor Antibody Clone PR500 following heat induced epitope retrieval by boiling tissue sections in 10mM citrate buffer (pH 6.0) for 10-20 minutes and cooling at room temperature for 20 minutes prior to staining. HRP-DAB brown chromogenic signal reveals strong nuclear staining in tumor epithelial cells, consistent with the nuclear localization of Progesterone receptor (PGR) in hormone-responsive breast carcinoma tissue.



SDS-PAGE Analysis of Purified, BSA-Free Progesterone Receptor Antibody Clone PR500. Confirmation of Integrity and Purity of the Antibody.

Description

Progesterone receptor (PGR) is a ligand-activated nuclear hormone receptor encoded by the PGR gene that functions as a transcription factor regulating cellular responses to progesterone signaling. Progesterone Receptor Antibody Clone PR500 recognizes this steroid hormone receptor, also known as Nuclear receptor subfamily 3 group C member 3 (NR3C3), a member of the nuclear receptor superfamily that mediates hormone-dependent transcriptional regulation. Progesterone receptor is primarily localized in the nucleus where progesterone binding promotes receptor activation and recruitment to progesterone response elements that regulate gene transcription involved in reproductive biology and endocrine signaling.

Progesterone Receptor Antibody Clone PR500 is a mouse monoclonal antibody developed to detect the PGR protein in research studies investigating steroid hormone receptor biology. Clone PR500 recognizes Progesterone receptor and provides a tool for examining receptor expression and regulation in experimental systems used to study progesterone signaling pathways. Antibodies targeting Progesterone receptor are widely used in studies of hormone-responsive tissues and endocrine signaling mechanisms where progesterone-dependent transcriptional regulation plays a central role.

The PGR gene produces two principal receptor isoforms known as PR-A and PR-B, which arise from alternative transcription start sites and differ in their N-terminal regulatory regions. PR-B contains an additional transcriptional activation domain that enhances activation of progesterone-responsive genes, whereas PR-A can function both as a transcriptional activator and as a regulatory modulator of PR-B signaling activity. These isoforms contribute to the complex regulation of progesterone signaling and influence tissue-specific transcriptional responses to hormone stimulation.

Progesterone receptor signaling plays an important 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 processes such as ovulation, implantation, and mammary gland development. Progesterone receptor expression is also frequently examined in breast cancer research and in studies of other hormone-responsive tumors where steroid hormone signaling contributes to cellular proliferation and transcriptional control.

Progesterone Receptor Antibody Clone PR500 has been reported in a peer reviewed scientific publication investigating progesterone receptor biology and hormone-dependent signaling pathways. The presence of published research involving clone PR500 supports its use in experimental studies examining nuclear hormone receptor regulation, endocrine signaling mechanisms, and progesterone-dependent transcriptional control.

Application Notes

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the antibody to be titered up or down for optimal performance.

Immunogen

Recombinant human Progesterone Receptor protein was used as the immunogen for this Progesterone Receptor Antibody Clone PR500.

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

References (2)

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