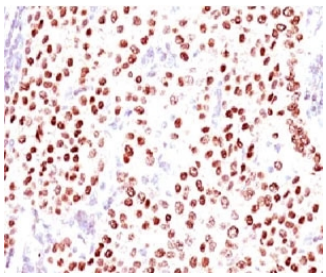
Progesterone Receptor Breast Cancer Antibody / PR Antibody [clone PGSR17] (V7038)

Catalog No.	Formulation	Size
V7038-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7038-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7038SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V7038IHC-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

Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	PGSR17
Purity	Protein G affinity chromatography
Buffer	1X PBS, pH 7.4
Gene ID	5241
Localization	Nuclear, cytoplasmic
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT Prediluted IHC Only Format : incubate for 30 min at RT (1)
Limitations	This Progesterone Receptor antibody is available for research use only.



Progesterone Receptor Breast Cancer Antibody / PR Antibody (clone PGSR17) immunohistochemistry analysis of Progesterone receptor / PGR in human breast carcinoma. FFPE human breast carcinoma tissue was stained with the mouse monoclonal Progesterone Receptor Breast Cancer Antibody (clone PGSR17) following heat induced epitope retrieval by boiling sections in pH 9 10mM Tris with 1mM EDTA 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 known nuclear localization of Progesterone receptor (PGR) in hormone-responsive breast cancer. PR immunohistochemistry staining is widely used in breast cancer diagnostics to evaluate progesterone receptor expression in tumor epithelial cells and to assess hormone receptor status alongside ER and HER2.

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 Breast Cancer Antibody / PR Antibody (clone PGSR17) recognizes this steroid hormone receptor, also known as Nuclear receptor subfamily 3 group C member 3 (NR3C3). Progesterone receptor is predominantly localized in the nucleus where progesterone binding activates transcriptional regulation of genes involved in endocrine signaling, reproductive biology, and hormone-dependent cellular differentiation.

Progesterone Receptor Breast Cancer Antibody is particularly relevant in studies of hormone-responsive malignancies, especially breast carcinoma where progesterone receptor expression serves as a key biomarker. PR immunohistochemistry is widely used in breast cancer diagnostics to evaluate progesterone receptor expression in tumor epithelial cells. Assessment of PR status by immunohistochemistry is routinely performed together with estrogen receptor (ER) and HER2 testing to determine hormone receptor status and guide therapeutic decision making in breast cancer patients.

PR Antibody (clone PGSR17) is a mouse monoclonal antibody developed to detect Progesterone receptor expression in hormone-responsive tissues and tumors. In immunohistochemistry studies, Progesterone receptor staining is typically observed as nuclear staining within epithelial cells of breast tissue and breast carcinoma. This nuclear staining pattern reflects the receptor's role as a DNA-binding transcription factor regulating progesterone-responsive gene expression in hormone-regulated tissues.

Progesterone receptor signaling plays a central role in breast biology and tumor progression. Expression of PGR is frequently observed in subsets of breast carcinomas that retain hormone responsiveness. Evaluation of progesterone receptor expression is therefore an important component of breast cancer characterization, helping researchers and pathologists understand hormone signaling pathways and endocrine responsiveness of tumor cells.

Progesterone Receptor Breast Cancer Antibody supports investigation of steroid hormone receptor biology and hormone-dependent tumor pathways. Detection of PR expression in breast carcinoma tissues allows researchers to study endocrine signaling mechanisms, examine receptor regulation in hormone-responsive tumors, and analyze progesterone receptor expression patterns in breast cancer models and related endocrine tissues.

Application Notes

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

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

Recombinant human Progesterone Receptor protein was used as the immunogen for this Progesterone Receptor Breast Cancer 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 antibody, Progesterone receptor A antibody, Progesterone receptor B antibody