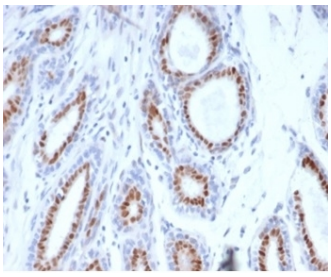
PGR Antibody / Progesterone Receptor [clone PGR/3817] (V9411)

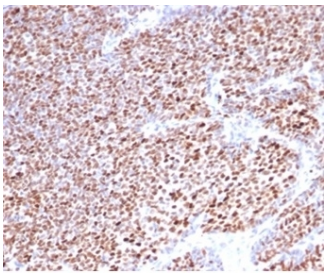
Catalog No.	Formulation	Size
V9411-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9411-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9411SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

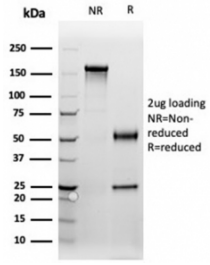
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	PGR/3817
Purity	Protein A/G affinity
UniProt	P06401
Localization	Nucleus
Applications	Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This PGR antibody is available for research use only.



PGR Antibody / Progesterone Receptor (clone PGR/3817) immunohistochemistry analysis of Progesterone receptor / PGR in human breast carcinoma. FFPE human breast carcinoma tissue was stained with the mouse monoclonal PGR antibody (clone PGR/3817) following heat induced epitope retrieval by boiling sections in pH 9 10mM Tris with 1mM EDTA for 20 minutes prior to cooling and staining. HRP-DAB brown chromogenic signal demonstrates nuclear staining in tumor epithelial cells forming glandular carcinoma structures, consistent with the nuclear localization of Progesterone receptor (PGR). 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 in breast carcinoma.



IHC staining of FFPE human breast carcinoma tissue with PGR antibody (clone PGR/3817). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free PGR antibody (clone PGR/3817) as confirmation of integrity and purity.

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. PGR Antibody / Progesterone Receptor (clone PGR/3817) recognizes this steroid hormone receptor, also known as PR or Nuclear receptor subfamily 3 group C member 3 (NR3C3). Progesterone receptor is predominantly localized in the nucleus where progesterone binding activates transcriptional programs controlling endocrine signaling, reproductive tissue biology, and hormone-dependent cellular differentiation.

PGR Antibody is commonly used in studies of hormone-responsive tissues and cancers, particularly breast carcinoma where progesterone receptor expression serves as an important biomarker. PR immunohistochemistry staining is widely used in breast cancer diagnostics to evaluate progesterone receptor expression in tumor epithelial cells. Assessment of PR status by immunohistochemistry is frequently performed together with estrogen receptor (ER) and HER2 testing to determine hormone receptor status and guide therapeutic decisions in breast cancer patients.

PGR Antibody (clone PGR/3817) is a mouse monoclonal antibody designed to detect progesterone receptor expression in endocrine tissues and hormone-responsive tumors. In immunohistochemistry analysis, progesterone receptor staining typically appears as nuclear staining in epithelial cells of breast tissue and breast carcinoma. This nuclear staining pattern reflects the receptor's function as a DNA-binding transcription factor that regulates progesterone-dependent gene expression.

The PGR gene produces two major receptor isoforms, PR-A and PR-B, which arise from alternative transcription start sites and differ in their N-terminal regulatory domains. PR-B contains an additional transcriptional activation domain that enhances progesterone-responsive gene activation, while PR-A can function both as a transcriptional activator and as a regulator of PR-B signaling activity. These receptor isoforms contribute to the complex regulation of progesterone signaling in hormone-responsive tissues.

PGR Antibody supports research into steroid hormone receptor biology and hormone-dependent tumor pathways. Detection of progesterone receptor expression in breast carcinoma tissues allows researchers to examine endocrine signaling mechanisms, evaluate receptor expression patterns in tumor epithelial cells, and study hormone receptor regulation in breast cancer and related endocrine tissues.

Application Notes

Optimal dilution of the PGR antibody should be determined by the researcher.

Immunogen

A portion of amino acids 483-571 was used as the immunogen for the PGR antibody.

Storage

Aliquot the PGR antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

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

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