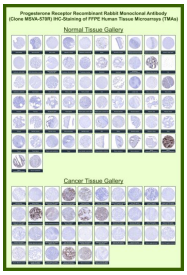
Progesterone Receptor Antibody for IHC / PR Immunohistochemistry Antibody [clone MSVA-570R] (V6103)

Catalog No.	Formulation	Size
V6103-100UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V6103-20UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	20 ug

Recombinant RABBIT MONOCLONAL

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	MSVA-570R
UniProt	P06401
Localization	Cytoplasm, Mitochondrion outer membrane, Nucleus
Applications	Immunohistochemistry (FFPE): 1:50-1:100
Limitations	This Progesterone Receptor Antibody for IHC is available for research use only.



Progesterone Receptor Antibody for IHC Tissue Microarray (TMA). Immunohistochemistry analysis of Progesterone receptor / PGR in formalin-fixed paraffin-embedded human normal and cancer tissue microarrays using rabbit monoclonal antibody clone MSVA-570R. Tissue microarray (TMA) staining with HRP-DAB brown chromogen demonstrates nuclear localization in hormone-responsive epithelial cells, particularly in breast epithelium and uterine tissues, while most non-hormone-dependent tissues show minimal to absent staining. Within tumor tissue microarrays, nuclear positivity is observed in subsets of breast carcinomas, supporting assessment of progesterone receptor status in tumor epithelial cells. Evaluation across large TMA panels enables direct comparison of PGR expression across diverse tissue types under standardized conditions. The observed staining patterns align with reported Progesterone receptor expression profiles in the Human Protein Atlas and support its use in hormone receptor analysis and tumor characterization.

Description

Progesterone receptor (PGR) is a ligand-activated nuclear hormone receptor that regulates transcriptional responses to

progesterone signaling in hormone-responsive tissues. Progesterone Receptor Antibody for IHC targets this steroid hormone receptor, also known as PR or Nuclear receptor subfamily 3 group C member 3 (NR3C3). The receptor functions as a nuclear transcription factor that modulates gene expression involved in reproductive biology, endocrine signaling, and hormone-dependent cellular differentiation. In immunohistochemistry studies, Progesterone receptor is typically detected as nuclear staining within epithelial and tumor cells in hormone-responsive tissues.

Progesterone Receptor Antibody for IHC enables visualization of nuclear Progesterone receptor expression in formalin-fixed paraffin-embedded tissues using immunohistochemistry. In IHC staining, Progesterone receptor appears predominantly as strong nuclear staining because the receptor acts as a DNA-binding transcription factor regulating progesterone-responsive genes. This nuclear staining pattern allows researchers and pathologists to examine receptor expression and distribution directly within tissue architecture.

PR immunohistochemistry staining is widely used in breast cancer diagnostics to evaluate progesterone receptor expression in tumor epithelial cells. Assessment of PR status by IHC is commonly performed together with estrogen receptor (ER) and HER2 testing to characterize hormone receptor status and guide therapeutic decisions in breast carcinoma. Detection of nuclear PR expression using Progesterone Receptor Antibody for IHC therefore plays an important role in studies of hormone-responsive breast tumors and endocrine signaling pathways.

Tissue microarray analysis using Progesterone Receptor Antibody for IHC demonstrates strong nuclear staining in hormone-responsive tissues such as breast epithelium, ovarian corpus luteum, and uterine endometrium. In cancer tissue microarrays, strong nuclear staining is observed in subsets of breast carcinoma and gynecologic tumors, consistent with the well-established role of progesterone receptor signaling in hormone-dependent cancers. Many other normal tissues and tumor types show little to no staining, reflecting the restricted expression pattern of the receptor.

Because progesterone receptor expression is an important biomarker in hormone-responsive malignancies, immunohistochemistry analysis of PR remains widely used in cancer research and diagnostic pathology. Progesterone Receptor Antibody for IHC provides a tool for detecting nuclear PR expression in FFPE tissues and for studying progesterone signaling pathways in endocrine tissues and hormone-responsive tumor models.

This antibody is also part of a broader collection of IHC antibodies validated by tissue microarray analysis, supporting consistent staining across normal and cancer tissues.

Application Notes

1. Optimal dilution of the Progesterone Receptor Antibody for IHC antibody should be determined by the researcher.

2. This PR / Progesterone receptor antibody is recombinantly produced by expression in human HEK293 cells.

3. Manual Protocol: Freshly cut sections should be used (less than 10 days between cutting and staining). Heat-induced antigen retrieval for 5 minutes in an autoclave at 121oC in pH 7.8 Target Retrieval Solution buffer. Apply the antibody at a dilution of 1:150 at 37oC for 60 minutes. Visualization of bound antibody by the EnVision Kit (Dako, Agilent) according to the manufacturer's directions.

Immunogen

A recombinant fragment (around amino acids 1-200) of human PGR protein (exact sequence is proprietary) was used as the immunogen for the PR / Progesterone receptor antibody.

Storage

PR / Progesterone receptor antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.

Alternate Names

PR antibody, PGR antibody, NR3C3 antibody, Progesterone receptor antibody, Progesterone receptor PR antibody

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