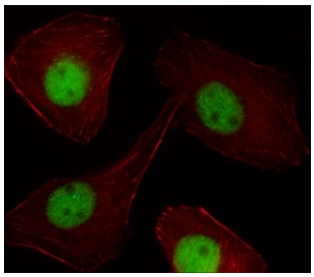
PR Antibody for IF / Progesterone Receptor Immunofluorescence Antibody (F47198)

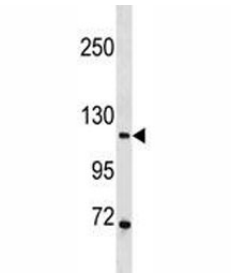
Catalog No.	Formulation	Size
F47198-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F47198-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	P06401
Localization	Nuclear, cytoplasmic
Applications	Immunofluorescence : 1:10-1:50 Western Blot : 1:1000
Limitations	This PR/Progesterone Receptor antibody is available for research use only.



Fluorescent image of U251 cell stained with PR Antibody for IF at 1:25. Immunoreactivity is localized to the nucleus strongly and vesicles weakly.



PR/Progesterone Receptor antibody western blot analysis in 293 lysate. Expected molecular weight: 82-94 kDa (isoform A) and 99-120 kDa (isoform B).

Description

Progesterone receptor (PGR) is a ligand-activated nuclear hormone receptor encoded by the PGR gene that functions as a transcription factor mediating cellular responses to progesterone signaling. PR Antibody for IF targets this steroid hormone receptor, also known as Nuclear receptor subfamily 3 group C member 3 (NR3C3), which belongs to the nuclear receptor superfamily of ligand-regulated transcription factors. The receptor is predominantly localized in the nucleus where progesterone binding activates transcriptional programs involved in reproductive biology, endocrine signaling, and hormone-dependent cellular differentiation.

PR Antibody for IF is designed for visualization of Progesterone receptor protein by immunofluorescence microscopy. Immunofluorescence analysis provides a powerful method for examining the intracellular localization of nuclear hormone receptors, allowing researchers to visualize the distribution of Progesterone receptor within cells. In immunofluorescence experiments, Progesterone receptor is typically observed as nuclear fluorescence staining because the receptor functions as a DNA-binding transcription factor that regulates progesterone-responsive gene expression.

Progesterone Receptor Immunofluorescence Antibody enables detection of receptor localization patterns in hormone-responsive cell models commonly used in endocrine signaling research. Immunofluorescence staining allows investigators to evaluate receptor presence within the nucleus and to examine changes in receptor localization following progesterone stimulation or signaling pathway activation. Because ligand binding promotes receptor activation and transcriptional regulation, immunofluorescence microscopy is frequently used to study nuclear accumulation and distribution of Progesterone receptor during hormone signaling events.

Immunofluorescence detection of Progesterone receptor is widely used in studies of breast cancer biology and reproductive tissue signaling. Hormone-responsive breast cancer cell lines such as T-47D and MCF-7 commonly express high levels of PGR, making them useful models for visualizing receptor localization using immunofluorescence microscopy. Nuclear fluorescence staining patterns observed with Progesterone receptor antibodies help researchers examine receptor expression, evaluate hormone responsiveness, and investigate signaling pathways involved in endocrine regulation.

PR Antibody for IF provides a useful tool for studying steroid hormone receptor biology using immunofluorescence imaging approaches. Detection of Progesterone receptor by immunofluorescence enables visualization of nuclear receptor distribution, assessment of receptor expression in cultured cells, and analysis of progesterone-dependent transcriptional signaling pathways. Immunofluorescence analysis of PGR localization therefore contributes to understanding hormone receptor function, nuclear signaling mechanisms, and endocrine regulation in hormone-responsive cellular systems.

Application Notes

Titration of the PR Antibody for IF may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 816-843 from the human protein was used as the immunogen for this PR/Progesterone Receptor antibody.

Storage

Aliquot the PR/Progesterone Receptor antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

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