

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human PR-A and PR-B in Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human PR-B Met1-Leu189 Accession # P06401
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

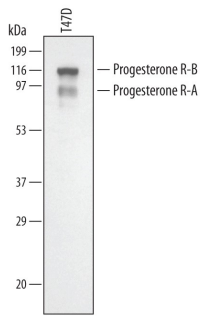
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Immunocytochemistry	1-15 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below

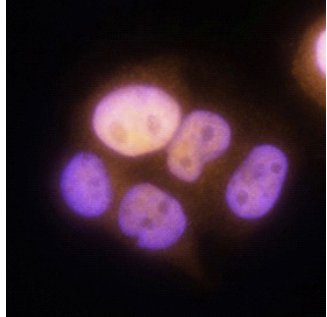
DATA

Western Blot



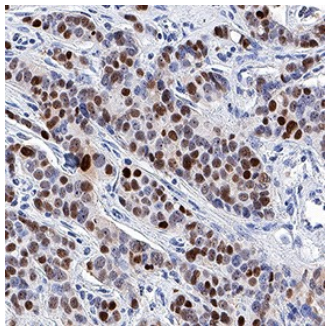
Detection of Human Progesterone R/NR3C3 by Western Blot. Western blot shows lysates of T47D human breast cancer cell line. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human Progesterone R/NR3C3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5415) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). Specific bands were detected for PR-A and PR-B at approximately 90 and 118 kDa, respectively (as indicated). This experiment was conducted using [Immunoblot Buffer Group 1](#).

Immunocytochemistry



Progesterone R/NR3C3 in T47D Human Cell Line. Progesterone R/NR3C3 was detected in immersion fixed T47D human breast cancer cell line using Sheep Anti-Human Progesterone R/NR3C3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5415) at 1.7 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (red; Catalog # NL010) and counterstained with DAPI (blue). Specific staining was localized to nuclei. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Immunohistochemistry



Progesterone R/NR3C3 in Human Prostate Cancer Tissue. Progesterone R/NR3C3 was detected in immersion fixed paraffin-embedded sections of human prostate cancer tissue using Sheep Anti-Human Progesterone R/NR3C3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5415) at 5 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). Specific staining was localized to nuclei. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Progesterone Receptor B (PR-B) is a 118 kDa member of the NR3 subfamily within the nuclear hormone receptor family of proteins. It is expressed in female reproductive tissues as well as neurons throughout the CNS. PR-B is particularly important in the mammary gland where it mediates proliferative responses to progesterone. Human PR-B is 933 amino acids (aa) in length. It contains an N-terminal regulatory region (aa 1-566), a DNA binding domain (aa 567-639), and a steroid-binding region (aa 681-933). Ligand binding induces a key phosphorylation event at Ser294 by ERK1/2. An alternate start site at Met165 generates 90 kDa PR-A, an isoform particularly important in the ovary and uterus that insures fertility. Other isoforms show a deletion of either aa 637-738 or 598-636, or a 17 aa substitution for aa 787-933.