

## Anti-Progesterone Receptor (Ser294) Antibody

Our Anti-Progesterone Receptor (Ser294) phosphospecific primary antibody from PhosphoSolutions is mo Catalog # AN1527

### Specification

## Anti-Progesterone Receptor (Ser294) Antibody - Product Information

Application Primary Accession Host Clonality Isotype Calculated MW WB <u>P06401</u> Mouse Monoclonal IgG1 98981

### Anti-Progesterone Receptor (Ser294) Antibody - Additional Information

Gene ID Other Names

NR3C3 antibody, Nuclear receptor subfamily 3 group C member 3 antibody, PGR antibody, PR antibody, PRB antibody, PRGR\_HUMAN antibody, Progesterone receptor antibody, Progestin receptor form A antibody, Progestin receptor form B antibody

5241

#### Target/Specificity

There is accumulating evidence to suggest that progesterone plays an essential role in the regulation of growth and differentiation of mammary glands and thus may play a key role in breast cancer (Edwards, 2005). The biological response to progesterone is mediated by two distinct forms of the human progesterone receptor (PR-A and PR-B forms). In most cell contexts, the B form functions as a transcriptional activator, whereas the A form functions as a transcriptional inhibitor of steroid hormones (Attia et al., 2000; Lin et al., 2003). Recently it has been demonstrated that there is differential hormone dependent regulation of the phosphorylation of the A and B forms of the receptor (Clemm et al., 2000) . Treatment of T47D breast cancer cells with progestin agonist increases the phosphorylation of Ser-190 and Ser-294 with different kinetics. These phosphorylation events may differentially affect the transcriptional activity of the receptor.

Dilution WB~~1:1000

Format Protein G Purified

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

Anti-Progesterone Receptor (Ser294) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping Blue Ice

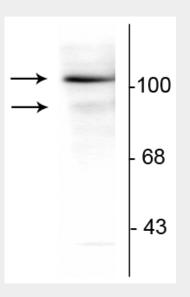


# Anti-Progesterone Receptor (Ser294) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-Progesterone Receptor (Ser294) Antibody - Images



Western blot of T47D cell lysate prepared from cells that had been incubated in the presence of the synthetic progestin agonist R5020 (500 nM) showing specific immunolabeling of the ~90 kDa PR-A isoform and the ~120 kDa PR-B isoform of the progesterone receptor phosphorylated at Ser294. The immunolabeling is blocked by the phosphopeptide used as the antigen (not shown).

# Anti-Progesterone Receptor (Ser294) Antibody - Background

There is accumulating evidence to suggest that progesterone plays an essential role in the regulation of growth and differentiation of mammary glands and thus may play a key role in breast cancer (Edwards, 2005). The biological response to progesterone is mediated by two distinct forms of the human progesterone receptor (PR-A and PR-B forms). In most cell contexts, the B form functions as a transcriptional activator, whereas the A form functions as a transcriptional inhibitor of steroid hormones (Attia et al., 2000; Lin et al., 2003). Recently it has been demonstrated that there is differential hormone dependent regulation of the phosphorylation of the A and B forms of the receptor (Clemm et al., 2000). Treatment of T47D breast cancer cells with progestin agonist increases the phosphorylation of Ser-190 and Ser-294 with different kinetics. These phosphorylation events may differentially affect the transcriptional activity of the receptor.