10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Phospho-Ser294 Progesterone Receptor Antibody
Affinity purified mouse monoclonal antibody
Catalog # AN1023

Specification

Phospho-Ser294 Progesterone Receptor Antibody - Product Information

Application	**WB**
Primary Accession	P06401
Reactivity	**Human**
Predicted	**Monkey**
Host	**mouse**
Clonality	**monoclonal**
Isotype	**IgG1**
Calculated MW	**90/120 KDa**

Phospho-Ser294 Progesterone Receptor Antibody - Additional Information

Gene ID	**5241**
Gene Name	**PGR**

Other Names
Progesterone receptor, PR, Nuclear receptor subfamily 3 group C member 3, PGR, NR3C3

Target/Specificity
Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser294 conjugated to KLH.

Dilution
WB~~ 1:1000

Format
Prepared by affinity purification using a protein G column.

Antibody Specificity
Specific for the ~90k PR-A isoform and the ~120k PR-B isoformphosphorylated at Ser294. Immunolabeling is blocked by the phosphopeptide used as theantigen but not by the corresponding dephosphopeptide.

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

Shipping
Blue Ice

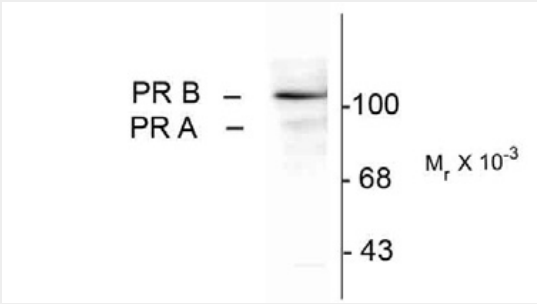
10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Phospho-Ser294 Progesterone Receptor Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Phospho-Ser294 Progesterone Receptor Antibody - Images



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

Phospho-Ser294 Progesterone Receptor 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.

Phospho-Ser294 Progesterone Receptor Antibody - References

Attia GR, Zeitoun K, Edwards D, Johns A, Carr BR, Bulun SE (2000) Progesterone receptor isoform A

but not B is expressed in
endometriosis. J Clin Endocrinol Metab 85:2897-2902.
Clemm DL, Sherman L, Boonyara
tanakornkit V, Schrader WT, Weigel NL, Edwa
rds DP (2000) Differential hormone-dependent
phosphorylation of progesterone receptor A and B forms reveal
ed by a phosphoserine site-specific monoclonal antibody.
Mol Endocrinol 14:52-65.
Edwards DP (2005) Regulation of signal transduction pathwa
ys by estrogen and progesterone. Annu Rev Physiol 67:335-376.
Lin VC, Woon CT, Aw SE, Guo C (2003) Distinct molecular path
ways mediate progesterone-induced growth inhibition and
focal adhesion. Endocrinology 144:5650-5657.