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

PR Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1085a

Specification

PR Antibody - Product Information

Application	**WB, IHC**
Primary Accession	P06401
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**

Description
PR(progesterone receptor), with 933-amino acid protein (about 110kDa), a member of the steroid receptor superfamily, mediates the physiologic effects of progesterone, PR is mediated by two functionally different isoforms of the progesterone receptor, the full length PR-B and the short form PR-A. The PR-A and PR-B proteins are 94 kDa and 114 kDa respectively. That are equimolar in the normal breast but dysregulated in advanced disease. PR is prognostic markers in breast cancers irrespective of the patient's progestational status Human progesterone.

Immunogen
Purified recombinant fragment of PR expressed in E. Coli.

Formulation
Ascitic fluid containing 0.03% sodium azide.

PR Antibody - Additional Information

Gene ID 5241

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

Dilution
WB~~1/500 - 1/2000
IHC~~1/200 - 1/1000

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
PR Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

PR Antibody - Protein Information

Name PGR

Synonyms NR3C3

Function
The steroid hormones and their receptors are involved in the regulation of eukaryotic gene expression and affect cellular proliferation and differentiation in target tissues. Depending on the isoform, progesterone receptor functions as a transcriptional activator or repressor.

Cellular Location
Nucleus. Cytoplasm. Note=Nucleoplasmic shuttling is both hormone- and cell cycle-dependent. On hormone stimulation, retained in the cytoplasm in the G(1) and G(2)/M phases [Isoform 4]: Mitochondrion outer membrane

Tissue Location
In reproductive tissues the expression of isoform A and isoform B varies as a consequence of developmental and hormonal status. Isoform A and isoform B are expressed in comparable levels in uterine glandular epithelium during the proliferative phase of the menstrual cycle. Expression of isoform B but not of isoform A persists in the glands during mid-secretory phase. In the stroma, isoform A is the predominant form throughout the cycle. Heterogeneous isoform expression between the glands of the endometrium basalis and functionalis is implying region-specific responses to hormonal stimuli

PR 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

PR Antibody - Images

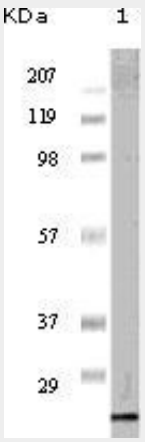


Figure 1: Western blot analysis using PR mouse mAb against PR recombinant protein (1).

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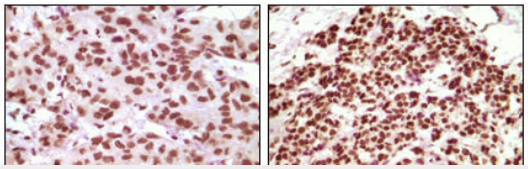


Figure 2: Immunohistochemical analysis of paraffin-embedded human infiltrating ductal carcinoma tissue(left) and simple carcinoma of breast cancer tissue(right), showing nuclear localization using PR mouse mAb with DAB staining.

PR Antibody - References

1. McGuire, W.L., et al. 1986. Cancer.Surv.5:527-536. 2. Helena CD, Curt WB, Paul V,et al. 2000. J.Clin. Pathol. 53:201-205. 3. Wen, D.X., et al. 1994.Mol.Cell.Biol.14:8356-8364. 4. GM Clark, CK Osborne, WL McGuire.1984.J. Clin. Oncol., 2:1102-1109.