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PR Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1085a

Product Information

Application	WB, IHC, E
Primary Accession	P06401
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	2F12B4; 2F12H2
Isotype	IgG1
Calculated MW	98981
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.

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 E~~N/A
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.

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

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.

Images

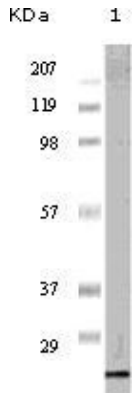

Figure 1: Western blot analysis using PR mouse mAb against PR recombinant protein (1).

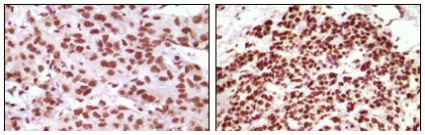

Figure 2: Immunohistochemical analysis of paraffin-embedded human infiltrating ductal carcinoma tissue(left) and simple carcinoma of breast cancer tissue(right), showing nuclear localization using PR mouse mAb with DAB staining.