

Product Specification Sheet

Progesterone Receptor (PR) Antibodies

Cat # PR12-M	Mouse monoclonal Anti-Human Progesterone Receptor (PR) , IgG	SIZE: 100 ug
Cat # PR12-C	Human Cell-30 protein lysate WB positive control for PR	SIZE: 100 ul

The progesterone receptor (PR) is a member of the superfamily of steroid hormone receptors. In response to ligand binding, these nuclear receptors bind to their target DNA response element and modulate the transcription of specific genes. Hormone induced binding of receptor to its response element promotes the formation of a stable initiation complex, which allows for efficient transcription by RNA polymerase II. Steroid hormone receptors are characterized by a six domain structure labeled A through F. The A/B domain is responsible for trans-activation, C is the DNA binding region and the most highly conserved, D is involved in nuclear localization and E has a variety of functions including ligand binding, dimerization, interaction with HSP90 and trans-activation. There are two forms of the progesterone receptor; the A-receptor (94 kDa) is a naturally occurring, truncated form of the B-receptor (120 kDa). Both forms bind progesterone but may have distinct biological properties. PR is expressed in several tissues especially uterus and breast. PR is one of the most important hormones in the regulation of growth and differentiation in mammary tissue and is thought to play an important role in mammary carcinogenesis. The measurement of PR has become an important prognostic factor in breast cancer and is useful for predicting the likelihood of response to endocrine therapy.

Source of Antigen, & Antibodies

Antigen	Recombinant human progesterone receptor; epitope has been localized to the N-terminal half of the protein
Ab Host/type	Mouse, monoclonal IgG1
Ab Format	Purified IgG (cat #PR12-M) supplied in PBS, pH 7.4 at 1 mg/ml (see lot sp conc on the vial)
2-ab	Goat Anti-mouse IgG-HRP conjugate Cat # 40320 (AP, biotin, FITC conjugates also available)
-ve control	Cat # 20008-1, Mouse (non-immune) Serum IgG, purified, suitable for ELISA, Western, IHC as -ve control

Human Cell-30 express high level of PR. For **#PR12-C** western blot positive control, total cell protein lysate of Cell-30 lysate is supplied in SDS-PAGE sample buffer (reduced). Load 10-20 ul/lane of **#PR12-C** for good visibility with antibody Cat # **PR12-M**. Store at -20oC in suitable size aliquots. SDS may crystallize in cold conditions. It should redissolve by warming before taking it from the stock. It should be heated once prior to loading on gels. If the product has been stored for several weeks, then it may be preferable to add 5 ul of fresh 2x sample buffer per 10 ul of the **#PR12-C** solution prior to heating and loading on gels. This preparation is not biologically active. It is not suitable for ELISA or other applications where native protein is required. Do not freeze, thaw, or heat repeatedly

Form & Storage

Affinity pure IgG

100 ug/100ul solution lyophilized powder
supplied in Buffer: PBS, pH 7.2,
Reconstitute powder in PBS at 1 mg/ml

Storage

Short-term: unopened, undiluted vials for less than a week at 4oC.

Long-term: at -20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at -20oC or below.

Shipping: 4oC for solutions and room temp for powder.

Recommended Usage

Western Blotting (1-2 ug/ml). T-47D cells can be used positive control. Recognizes the ~94 kDa progesterone receptor A and the ~120 kDa progesterone receptor B and singlest A-form (81 Kda).

ELISA (1:10-50K; using 50-100 ng A1R control peptide/well).

Histochemistry & Immunofluorescence: recommended for paraffin sections. No pretreatment required for staining human paraffin sections. Trypsin is required for rat or chicken paraffin sections. Trypsin/saponin is required for feline paraffin sections. Antibody should be titrated for optimal results in individual systems.

Specificity & Cross-reactivity

PR11-M antibody reacts with human, mouse, rat, monkey and baboon PR. Other species not tested.

General References: Menendez-Botet, C. J. and Schwartz, M. K. J. 1992. Int. Fed. Clin. Chem. 4, 94; Clarke, R., Dickson, R. B. and Lippman, M. E. 1991. Nuclear Hormone Receptors, 297, Academic Press, New York.; Green, S. and Chambon, P. 1991. Nuclear Hormone Receptors., 15, Academic Press, New York; Wahli, W. and Martinez, E. 1991. FASEB J. 5, 2243; Beato, M. 1989. Cell 56, 335; Evans, R. M. 1988 Science 240, 889.

*This product is for In vitro research use only.

Related material available from ADI

Antibodies to AR, ER alpha, beta, PR are available.

Western blot Recycling kit (probe same blot with multiple antibodies)

Anti-Rabbit IgG-HRP Conjugate and ECL Reagents

PR12-M

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