

Product Specification Sheet

Progesterone Receptor (PR) Antibodies

Cat # PR11-M Mouse monoclonal Anti-Human Progesterone Receptor (PR) IgG

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
Ab Host/type	Mouse, monoclonal IgG1
Ab Format	Purified IgG (cat #PR11-M) supplied in PBS, pH 7.4 and 0.1% gelatin and 0.05% azide (concn ~ 1 mg/ml)
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

Form & Storage

Affinity pure IgG

100 ul solution lyophilized powder
supplied in Buffer: PBS, pH 7.2, 0.1% Gelatin, 0.05% sodium azide

Reconstitute powder in PBS at 1 mg/ml

Storage

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

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

Stability: 6-12 months at -20°C or below.

Shipping: 4°C 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.

HBL100 Cells can be used as negative control

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, rat, chicken and cat 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

PR11-M

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