

# Progesterone Receptor A/B (C89F7) Rabbit mAb

100 µl  
(10 western blots)



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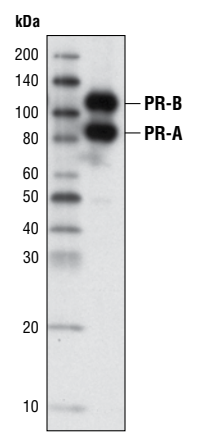
This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Applications	Species Cross-Reactivity*	Molecular Wt.	Isotype
W, IHC-P Endogenous	H	90 kDa (PR-A) 118 kDa (PR-B)	Rabbit IgG**

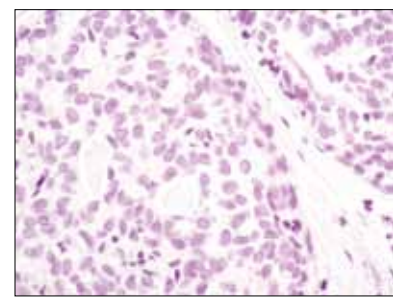
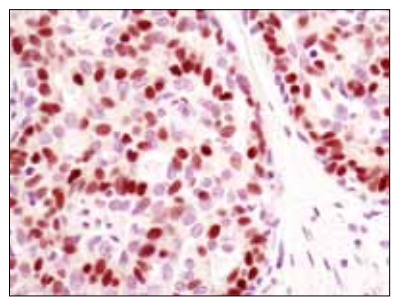
**Background:** Human progesterone receptor (PR) is expressed as two forms: the full length PR B and the short form PR A. PR A lacks the first 164 amino acid residues of PR B (1,2). Both PR A and PR B are ligand activated but differ in their relative ability to activate target gene transcription (3,4). The activity of PR is regulated by phosphorylation, and at least seven serine residues are phosphorylated in its amino-terminal domain. Three sites (Ser81, 102 and 162) are unique to full length PR B while others (Ser190, 294, 345 and 400) are shared by both isoforms (5). Phosphorylation of PR B at Ser190 (equivalent to Ser26 of PR A) is catalyzed by CDK2 (6). Mutation of Ser190 results in decreased activity of PR (7), suggesting that the phosphorylation of Ser190 may be critical to its biological function.

**Specificity/Sensitivity:** Progesterone Receptor A/B (C89F7) Rabbit mAb detects endogenous levels of total progesterone receptor A and B proteins. This antibody does not cross-react with other PR family members.

**Source/Purification:** Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Tyr541 of human progesterone receptor.



Western blot analysis of extracts from T47D cells using Progesterone Receptor A/B (C89F7) Rabbit mAb.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma using Progesterone Receptor A/B (C89F7) Rabbit mAb in the presence of control peptide (left) or antigen-specific peptide (right).

**IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.**

Entrez-Gene ID #5241  
Swiss-Prot Acc. #P06401

**Storage:** Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

\*Species cross-reactivity is determined by western blot.

\*\*Anti-rabbit secondary antibodies must be used to detect this antibody.

**Recommended Antibody Dilutions:**

Western Blotting	1:1000
Immunohistochemistry (Paraffin)	1:100†
Unmasking buffer:	Citrate
Antibody diluent:	SignalStain® Antibody Diluent #8112
Detection reagent:	SignalStain® Boost (HRP, Rabbit) #8114

†Optimal IHC dilutions determined using SignalStain® Boost IHC Detection Reagent.

For application specific protocols please see the web page for this product at [www.cellsignaling.com](http://www.cellsignaling.com).

Please visit [www.cellsignaling.com](http://www.cellsignaling.com) for a complete listing of recommended companion products.

**Background References:**

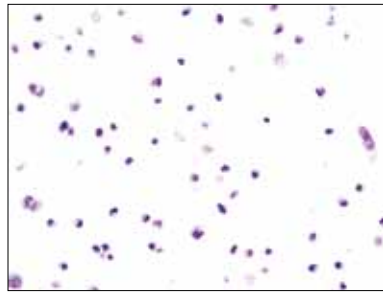
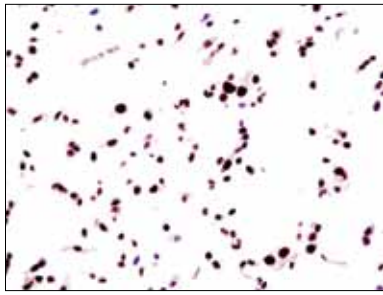
- (1) Evans, R.M. (1988) *Science* 240, 889–895.
- (2) Kastner, P. et al. (1990) *EMBO J.* 11, 1603–1614.
- (3) Giangrande, P.H. et al. (2000) *Mol. Cell. Biol.* 20, 3102–3115.
- (4) Wen, D.X. et al. (1994) *Mol. Cell. Biol.* 14, 8356–8364.
- (5) Clemm, D.L. et al. (2000) *Mol. Endocrinol.* 14, 52–65.
- (6) Zhang, Y. et al. (1997) *Mol. Endocrinol.* 11, 823–832.
- (7) Takimoto, G.S. et al. (1996) *J. Biol. Chem.* 271, 13308–13316.

Rabbit monoclonal antibody is produced under license (granting certain rights including those under U. S. Patent No. 5,675,063) from Epitomics, Inc.

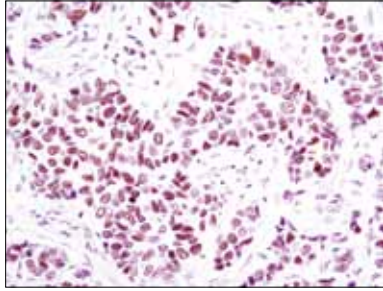
**Applications Key:** W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide

**Species Cross-Reactivity Key:** H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine

Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.



*Immunohistochemical analysis of paraffin-embedded T47D cells (positive, left) and MDA-MB-231 cells (negative, right) using Progesterone Receptor A/B (C89F1) Rabbit mAb.*



*Immunohistochemical analysis of paraffin-embedded human breast carcinoma using Progesterone Receptor A/B (C89F1) Rabbit mAb.*