

#3157 Store at -20°C

Progesterone Receptor B (C1A2) 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, IF-IC, F Endogenous	H	118 kDa	Rabbit IgG**

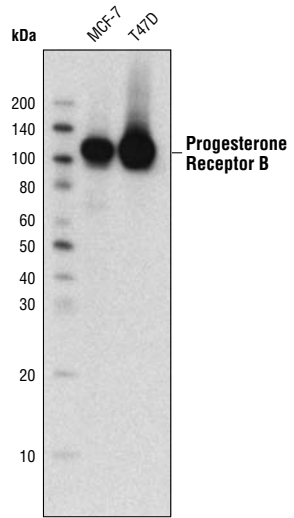
Background: Human progesterone receptor (PR) is expressed as two forms: the full length PR B and the short form PR A. PR A lacks the first 164 amino acid residues of PR B (1,2). Both PR A and PR B are ligand activated but differ in their relative ability to activate target gene transcription (3,4). The activity of PR is regulated by phosphorylation; at least seven serine residues are phosphorylated in its amino-terminal domain. Three sites (Ser81, Ser102 and Ser162) are unique to full length PR B while others (Ser190, Ser294, 345 and Ser400) 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 B (C1A2) Rabbit mAb detects endogenous levels of total progesterone receptor B protein. This antibody does not cross-react with other PR family members.

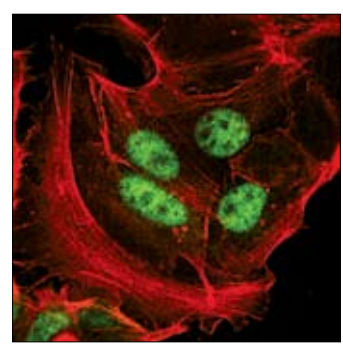
Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ser115 of human progesterone receptor.

Background References:

- (1) Evans, R.M. (1988) *Science* 240, 889–895.
- (2) Kastner, P. et al. (1990) *EMBO J.* 112, 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



Western blot analysis of extracts from MCF-7 and T47D cells using Progesterone Receptor B (C1A2) Rabbit mAb.



Confocal immunofluorescent analysis of MCF-7 cells using Progesterone Receptor B (C1A2) Rabbit mAb (green). Actin filaments have been labeled with DY-554 phalloidin (red).

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)	1:800
Unmasking buffer:	Citrate
Antibody diluent:	SignalStain® Antibody Diluent #8112
Immunofluorescence (IF-IC)	1:800
Flow Cytometry	1:200

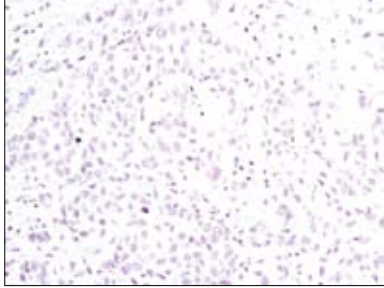
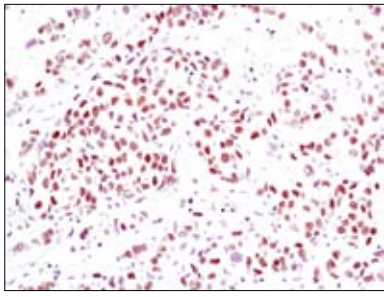
For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

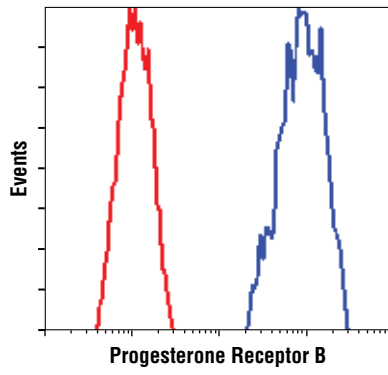
IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

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.

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Immunohistochemical analysis of paraffin-embedded human breast carcinoma using Progesterone Receptor B Receptor (C1A2) Rabbit mAb in the presence of control peptide (upper) or antigen-specific peptide (lower).



Flow cytometric analysis of T-47D cells using Progesterone Receptor B Receptor (C1A2) Rabbit mAb (blue) compared to a nonspecific negative control antibody (red).