Revision 3

Store at -20C

#3157

# Progesterone Receptor B (C1A2) Rabbit mAb

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**For Research Use Only. Not for Use in Diagnostic Procedures.**

| Applications: | Reactivity: | Sensitivity: | MW (kDa): | Source/Isotype: | UniProt ID: | Entrez-Gene Id: |
|---|---|---|---|---|---|---|
| W, IHC-P, IF-IC, FC-FP | H | Endogenous | 118 | Rabbit | #P06401 | 5241 |

## Product Usage Information

| Application | Dilution |
|---|---|
| Western Blotting | 1:1000 |
| Immunohistochemistry (Paraffin) | 1:800 |
| Immunofluorescence (Immunocytochemistry) | 1:800 |
| Flow Cytometry (Fixed/Permeabilized) | 1:200 |

## 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.

For a carrier free (BSA and azide free) version of this product see product #31535.

## 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

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 other sites (Ser190, Ser294, Ser345, 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 at Ser190 may be critical to its biological function.

## 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.

## Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

## Western Blot Buffer

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

## Applications Key

**W:** Western Blotting **IHC-P:** Immunohistochemistry (Paraffin) **IF-IC:** Immunofluorescence (Immunocytochemistry) **FC-FP:** Flow Cytometry (Fixed/Permeabilized)

## Cross-Reactivity Key

**H:** Human

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