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 Antibody detects endogenous levels of total progesterone receptor A and B proteins. This antibody does not cross-react with other PR family members.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Tyr541 of human progesterone receptor.

Background References:

Recommended Antibody Dilutions: Western Blotting 1:1000
For application specific protocols please see the web page for this product at www.cellsignal.com.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. 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

Applications Cross-Reactivity: 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, Mm—monkey, Mv—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

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.