Revision 1

#35591 Store at +4C

Progesterone Receptor A/B (D8Q2J) XP® Rabbit mAb (Alexa Fluor® 488 Conjugate)

Cell Signaling TECHNOLOGY®

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

Applications:	Reactivity:	Sensitivity:	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
IF-IC, FC-FP	H	Endogenous	Rabbit IgG	#P06401	5241

Product Usage Information

Application	Dilution
Immunofluorescence (Immunocytochemistry)	1:200
Flow Cytometry (Fixed/Permeabilized)	1:50

Storage

Supplied in PBS (pH 7.2), less than 0.1% sodium azide and 2 mg/ml BSA. Store at 4°C. Do not aliquot the antibody. Protect from light. Do not freeze.

Specificity / Sensitivity

Progesterone Receptor A/B (D8Q2J) XP® Rabbit mAb (Alexa Fluor® 488 Conjugate) recognizes endogenous levels of total progesterone receptor A and B proteins. This antibody does not cross-react with either the glucocorticoid receptor or the mineralocorticoid receptor.

Species predicted to react based on 100% sequence homology:

Monkey

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Tyr541 of human progesterone receptor protein.

Product Description

This Cell Signaling Technology antibody is conjugated to Alexa Fluor® 488 fluorescent dye and tested in-house for direct flow cytometric analysis in human cells. This antibody is expected to exhibit the same species cross-reactivity as the unconjugated Progesterone Receptor A/B (D8Q2J) XP® Rabbit mAb #8757.

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).

Applications Key

IF-IC: Immunofluorescence (Immunocytochemistry) **FC-FP:** Flow Cytometry (Fixed/Permeabilized)

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **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 **GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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Limited Uses