

Product datasheet

Anti-Progesterone Receptor antibody [EPR5489] - BSA and Azide free ab177930

Recombinant RabMAb

3 Images

Overview

Product name	Anti-Progesterone Receptor antibody [EPR5489] - BSA and Azide free
Description	Rabbit monoclonal [EPR5489] to Progesterone Receptor - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: WB Unsuitable for: Flow Cyt, ICC, IHC-P or IP
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide within Human Progesterone Receptor aa 900-1000 (C terminal). The exact sequence is proprietary. Database link: P06401
General notes	Ab177930 is the carrier-free version of ab133526 . This format is designed for use in antibody labeling, including fluorochromes, metal isotopes, oligonucleotides, enzymes.

Our [carrier-free formats](#) are supplied in a buffer free of BSA, sodium azide and glycerol for higher conjugation efficiency.

Use our [conjugation kits](#) for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

ab177930 is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm.

Maxpar® is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information [see here](#).

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb® patents](#).

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

receptor isoform B (PRB) is involved activation of c-SRC/MAPK signaling on hormone stimulation.

Isoform A: inactive in stimulating c-Src/MAPK signaling on hormone stimulation.

Isoform 4: Increases mitochondrial membrane potential and cellular respiration upon stimulation by progesterone.

Sequence similarities

Belongs to the nuclear hormone receptor family. NR3 subfamily.

Contains 1 nuclear receptor DNA-binding domain.

Domain

Composed of three domains: a modulating N-terminal domain, a DNA-binding domain and a C-terminal ligand-binding domain.

Post-translational modifications

Phosphorylated on multiple serine sites. Several of these sites are hormone-dependent.

Phosphorylation on Ser-294 occurs preferentially on isoform B, is highly hormone-dependent and modulates ubiquitination and sumoylation on Lys-388. Phosphorylation on Ser-102 and Ser-345 also requires induction by hormone. Basal phosphorylation on Ser-81, Ser-162, Ser-190 and Ser-400 is increased in response to progesterone and can be phosphorylated in vitro by the CDK2-A1 complex. Increased levels of phosphorylation on Ser-400 also in the presence of EGF, heregulin, IGF, PMA and FBS. Phosphorylation at this site by CDK2 is ligand-independent, and increases nuclear translocation and transcriptional activity. Phosphorylation at Ser-162 and Ser-294, but not at Ser-190, is impaired during the G(2)/M phase of the cell cycle. Phosphorylation on Ser-345 by ERK1/2 MAPK is required for interaction with SP1.

Sumoylation is hormone-dependent and represses transcriptional activity. Sumoylation on all three sites is enhanced by PIAS3. Desumoylated by SENP1. Sumoylation on Lys-388, the main site of sumoylation, is repressed by ubiquitination on the same site, and modulated by phosphorylation at Ser-294.

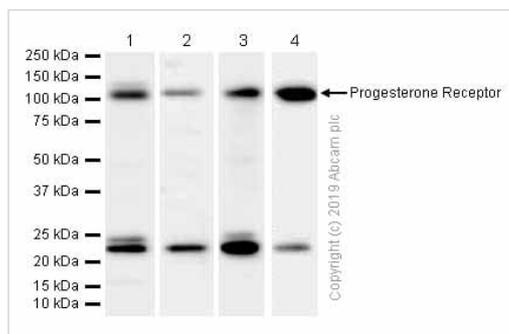
Ubiquitination is hormone-dependent and represses sumoylation on the same site. Promoted by MAPK-mediated phosphorylation on Ser-294.

Palmitoylated by ZDHHC7 and ZDHHC21. Palmitoylation is required for plasma membrane targeting and for rapid intracellular signaling via ERK and AKT kinases and cAMP generation.

Cellular localization

Nucleus. Cytoplasm. Nucleoplasmic shuttling is both hormone- and cell cycle-dependent. On hormone stimulation, retained in the cytoplasm in the G(1) and G(2)/M phases; Mitochondrion outer membrane and Nucleus. Cytoplasm. Mainly nuclear.

Images



Western blot - Anti-Progesterone Receptor antibody [EPR5489] - BSA and Azide free (ab177930)

All lanes : Anti-Progesterone Receptor antibody [EPR5489] ([ab133526](#)) at 1/1000 dilution (Purified)

Lane 1 : MDA-MB-435S (Human mammary gland ductal carcinoma melanocyte) whole cell lysates

Lane 2 : Human brain lysates

Lane 3 : Mouse brain lysates

Lane 4 : Rat brain lysates

Lysates/proteins at 15 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

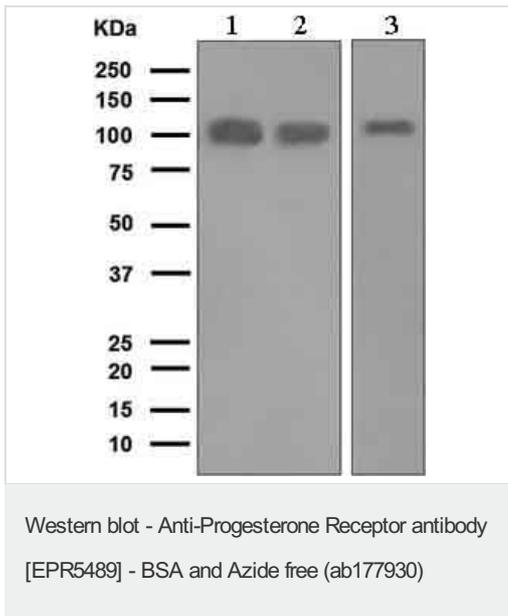
Predicted band size: 98 kDa

Observed band size: 118 kDa

[why is the actual band size different from the predicted?](#)

This data was developed using [ab133526](#), the same antibody clone in a different buffer formulation.

We are unsure how to define the extra bands.



All lanes : Anti-Progesterone Receptor antibody [EPR5489] ([ab133526](#)) at 1/1000 dilution

Lane 1 : MDA-MB-435 cell lysate

Lane 2 : HeLa cell lysate

Lane 3 : T47-D cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : HRP labelled Goat anti Rabbit IgG at 1/2000 dilution

Predicted band size: 98 kDa

Observed band size: 118 kDa [why is the actual band size different from the predicted?](#)

This data was developed using [ab133526](#), the same antibody clone in a different buffer formulation.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-Progesterone Receptor antibody [EPR5489] -
BSA and Azide free (ab177930)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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