Anti-Progesterone Receptor Antibody

ER1802-37

Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human, Mouse
Applications:	WB, IF-Cell, FC
Molecular Wt:	Predicted band size: 99/82 kDa

Description: The effects of progesterone are mediated by two functionally different isoforms of the progesterone receptor, PR-A and PR-B, which are transcribed from distinct, estrogen-inducible promoters within a single copy of the PR gene. The first 164 amino acids of PR-B are absent in PR-A. Progesterone-bound PR-A and PR-B have different transcription activation properties. Specifically, PR-B functions as a transcriptional activator in most cell and promoter contexts, while PR-A is transcriptionally inactive and functions as a strong ligand-dependent transdominant repressor of steroid hormone receptor transcriptional activity. An inhibitory domain (ID), which maps to the amino terminus of the receptor, exists within both PR isoforms. Interestingly, the ID is functionally active only in PR-A and is necessary for steroid hormone transrepression by PR-A, suggesting that PR-A and PR-B may have different conformations in the cell.

Immunogen: Synthetic peptide within human Progesterone Receptor aa 522-567.

Positive control: Mouse smooth muscle tissue lysate, A549, Hela, MCF-7.

Subcellular location: Nucleus. Cytoplasm.

Database links: SwissProt: P06401 Human | Q00175 Mouse

Recommended Dilutions:

WB	1:500-1:1,000
IF-Cell	1:200-1:800
FC	1:50-1:100

Storage Buffer: 1*PBS (pH7.4), 0.2% BSA, 50% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.

Purity: Immunogen affinity purified.

Images

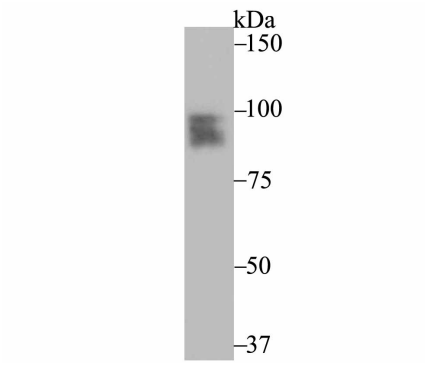

Fig1: Western blot analysis of Progesterone Receptor on mouse smooth muscle tissue lysate using anti-Progesterone Receptor antibody at 1/500 dilution.

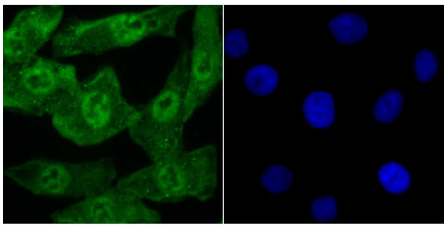

Fig2: ICC staining Progesterone Receptor in A549 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

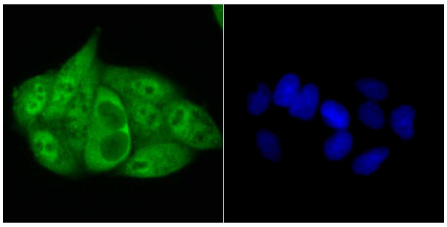

Fig3: ICC staining Progesterone Receptor in Hela cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

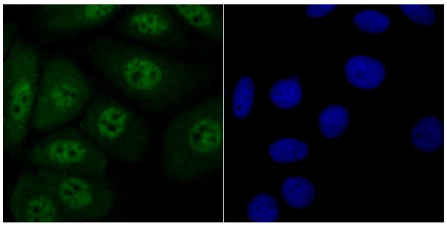

Fig4: ICC staining Progesterone Receptor in MCF-7 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

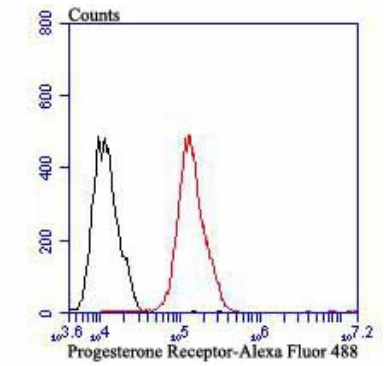

Fig5: Flow cytometric analysis of MCF-7 cells with Progesterone Receptor antibody at 1/100 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black). Alexa Fluor 488-conjugated goat anti-rabbit IgG was used as the secondary antibody.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Meyer M E et al. A limiting factor mediates the differential activation of promoters by the human progesterone receptor isoforms. J Biol Chem 267:10882-10887 (1992).
2. Giangrande P H et al. Mapping and characterization of the functional domains responsible for the differential activity of the A and B isoforms of the human progesterone receptor. J Biol Chem 272:32889-32900 (1997).