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Rabbit Anti-progesterone receptor antibody

SL0111R

Product Name	progesterone receptor
Chinese Name	孕激素受体抗体
Alias	NR3C3; Nuclear receptor subfamily 3 group C member 3; PGR; PR; PRA; PRB; Progesterone receptor; Progestin receptor form A; Progestin receptor form B; PRGR_HUMAN; Progestin receptor form A; Progestin receptor form B.
Research Area	Tumour immunology Chromatin and nuclear signals Signal transduction Growth factors and hormones The cell membrane 受体 TumourCell biologyMaker
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human,Rat(predicted:Rabbit,Horse,Pig,Dog,Mouse)
Applications	WB=1:500-2000 ELISA=1:5000-10000 IHC-P=1:100-500 IHC-F=1:100-500 Flow-Cyt=1ug/Test IF=1:100-500 （Paraffin sections need antigen repair） WB=1:500-2000,Flow-Cyt=1ug/Test not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	103kDa
Cellular localization	The nucleus cytoplasmic
Form	Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human progesterone receptor: 501-600/933
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	Human,Rat(predicted:Rabbit,Horse,Pig,Dog,Mouse)1M TBS(pH7.4) with 1% BSA, Human,Rat(predicted:Rabbit,Horse,Pig,Dog,Mouse)3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
PubMed	PubMed
Product Detail	Estrogen and progesterone receptor are members of a family of transcription factors that are regulated by the binding of their cognate ligands. The interaction of hormone-bound estrogen receptors with estrogen responsive elements(EREs) alters transcription of ERE-containing genes. The carboxy terminal region of the estrgen receptor contains the ligand binding domain, the amino terminus serves as the transactivation domain, and the DNA binding domain is centrally located. Two forms of estrogen receptor have been identified, ER alpha and ER beta. ER alpha and ER beta have been shown to be differentially activated by various ligands. The biological response to progesterone is mediated by two distinct forms of the human progesterone receptor (hPR-Aand hPR-B), which arise from alternative splicing. In most cells, hPR-B functions as a transcriptional activator of progesterone-responsive gene, whereas hPR-A function as a transcriptional inhibitor of all steroid hormone receptors. **Function:** The steroid hormones and their receptors are involved in the regulation of eukaryotic gene expression and affect cellular proliferation and differentiation in target tissues. Progesterone receptor isoform B (PRB) is involved activation of c-SRC/MAPK signaling on hormone stimulation. Isoform A is inactive in stimulating c-Src/MAPK signaling on hormone stimulation. **Subunit:** Interacts with SMARD1 and UNC45A. Interacts with CUEDC2; the interaction promotes ubiquitination, decreases sumoylation, and repesses transcriptional activity. Interacts with PIAS3; the interaction promotes sumoylation of PR in a hormone-dependent manner, inhibits DNA-binding, and alters nuclear export. Interacts with SP1; the interaction requires ligand-induced phosphorylation on Ser-345 by ERK1/2 MAPK. Interacts with PRMT2. **Subcellular Location:** Nucleus. Cytoplasm. Note=Nucleoplasmic shuttling is both homone- and cell cycle-dependent. On hormone stimulation, retained in the cytoplasm in the G(1) and G(2)/M phases. Isoform A: Nucleus. Cytoplasm. Note=Mainly nuclear. **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.

Similarity:
Belongs to the nuclear hormone receptor family. NR3 subfamily.
Contains 1 nuclear receptor DNA-binding domain.

SWISS:
P06401

Gene ID:
5241

Database links:

Entrez Gene: 5241 Human

Entrez Gene: 18667 Mouse

Entrez Gene: 100009094 Rabbit

Entrez Gene: 25154 Rat

Omim: 607311 Human

SwissProt: P06401 Human

SwissProt: Q00175 Mouse

SwissProt: P06186 Rabbit

SwissProt: Q63449 Rat

Unigene: 2905 Human

Unigene: 32405 Human

Unigene: 742403 Human

Unigene: 12798 Mouse

Unigene: 437703 Mouse

Unigene: 1947 Rabbit

Unigene: 10303 Rat

类固醇受体（Steroid Receptors）孕激素受体是一类位于孕酮靶组织细胞内或细胞表面的特异蛋白质，特异地与孕酮结合，所形成的细胞溶质孕酮-受体复合物随后与 The nucleus 内的 DNA 结合，以启动蛋白质生物合成。孕酮受体有 A 和 B 两种，受雌激素诱导，半寿期很短。

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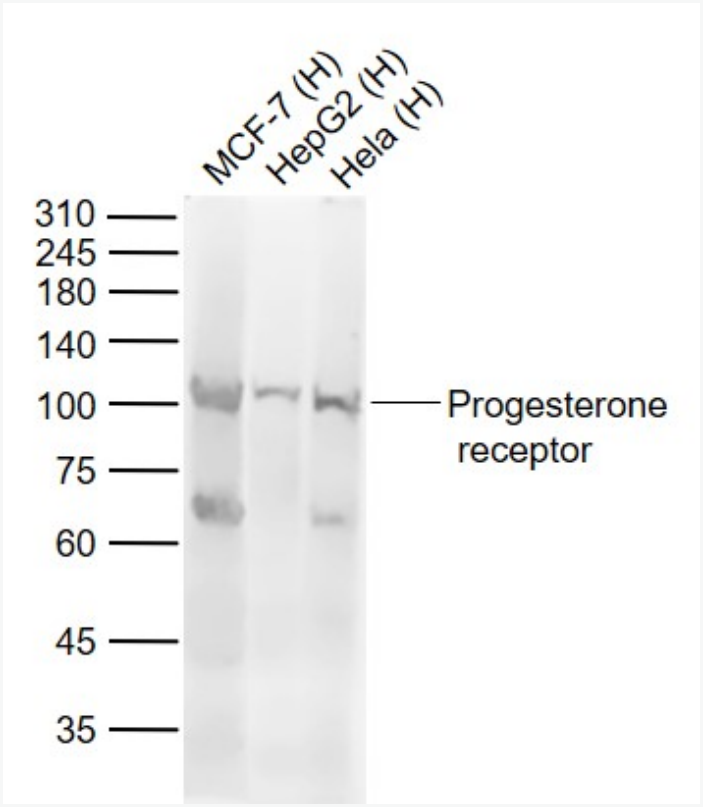
Product Picture



Sample:

Lane 1: MCF-7 (Human) Cell Lysate at 30 ug

Lane 2: HepG2 (Human) Cell Lysate at 30 ug

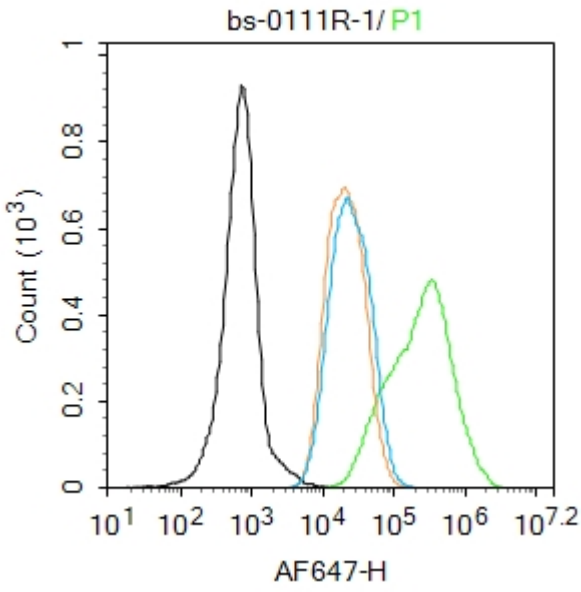
Lane 3: Hela (Human) Cell Lysate at 30 ug

Primary: Anti-progesterone receptor (SL0111R) at 1/500 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 118 /82-88 kD

Observed band size: 110 kD



Blank control: MCF7.

Primary Antibody (green line): Rabbit Anti-progesterone receptor antibody (SL0111R)

Dilution: 1μg /10^6 cells;

Isotype Control Antibody (orange line): Rabbit IgG .

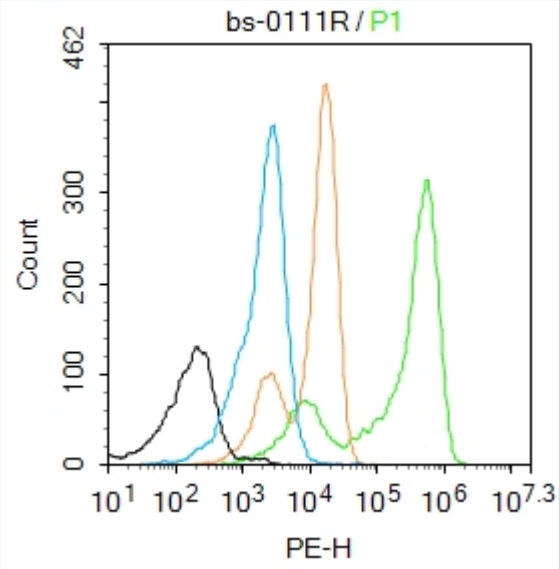
Secondary Antibody : Goat anti-rabbit IgG-AF647

Dilution: 1μg /test.

Protocol

The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at -20°C. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used

for 40 min at room temperature. Acquisition of 20,000 events was performed.



Blank control:K562.

Primary Antibody (green line): Rabbit Anti-progesterone receptor antibody (SL0111R)

Dilution: 2μg /10^6 cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody : Goat anti-rabbit IgG-PE

Dilution: 1μg /test.

Protocol

The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at-20℃. The cells were then incubated in 5%BSA to block non-specific protein-protein

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