



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.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Horse,Rabbit,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	103kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or 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
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
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-A and 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 represses 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 hormone- 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

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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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