Best Tools for immunology Research

PR (phospho Ser294) Polyclonal Antibody

Catalog No :	YP0531
Reactivity :	Human;Mouse;Rat
Applications :	WB;IHC
Target :	PR
Fields :	>>Oocyte meiosis;>>Progesterone-mediated oocyte maturation;>>Estrogen signaling pathway;>>Chemical carcinogenesis - receptor activation;>>Breast cancer
Gene Name :	PGR
Protein Name :	Progesterone receptor
Human Gene Id :	5241
Human Swiss Prot No :	P06401
Mouse Swiss Prot No :	Q00175
Rat Gene Id :	25154
Rat Swiss Prot No :	Q63449
Immunogen :	The antiserum was produced against synthesized peptide derived from human Progesterone Receptor around the phosphorylation site of Ser294. AA range:261-310
Specificity :	Phospho-PR (S294) Polyclonal Antibody detects endogenous levels of PR protein only when phosphorylated at S294.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500-2000;IHC 1:50-300

Purification : The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Concentration : 1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 98kD

Cell Pathway : Oocyte meiosis;Progesterone-mediated oocyte maturation;

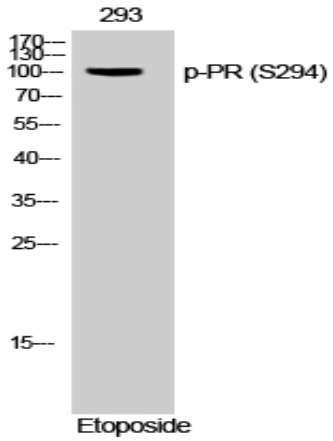
Background : This gene encodes a member of the steroid receptor superfamily. The encoded protein mediates the physiological effects of progesterone, which plays a central role in reproductive events associated with the establishment and maintenance of pregnancy. This gene uses two distinct promotors and translation start sites in the first exon to produce several transcript variants, both protein coding and non-protein coding. Two of the isoforms (A and B) are identical except for an additional 165 amino acids found in the N-terminus of isoform B and mediate their own response genes and physiologic effects with little overlap. [provided by RefSeq, Sep 2015],

Function : domain:Composed of three domains: a modulating N-terminal domain, a DNA-binding domain and a C-terminal steroid-binding domain.,function:Isoform A is inactive in stimulating c-Src/MAPK signaling on hormone stimulation.,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.,online information:Progesterone receptor entry,PTM: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 Se

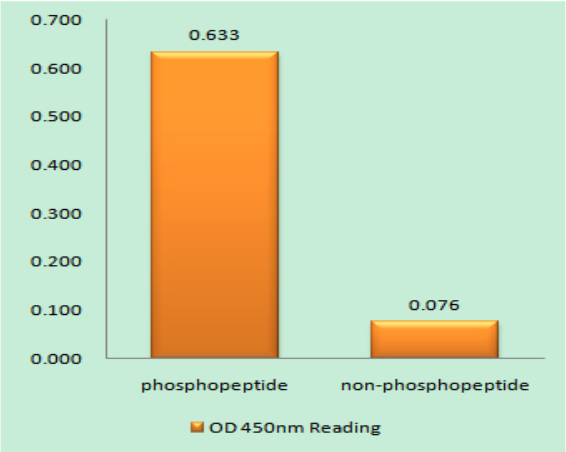
Subcellular Location : Nucleus. Cytoplasm. Nucleoplasmic shuttling is both hormone- and cell cycle-dependent. On hormone stimulation, retained in the cytoplasm in the G(1) and G(2)/M phases.; [Isoform A]: Nucleus. Cytoplasm. Mainly nuclear.; [Isoform 4]: Mitochondrion outer membrane .

Expression : In reproductive tissues the expression of isoform A and isoform B varies as a consequence of developmental and hormonal status. Isoform A and isoform B are expressed in comparable levels in uterine glandular epithelium during the proliferative phase of the menstrual cycle. Expression of isoform B but not of isoform A persists in the glands during mid-secretory phase. In the stroma, isoform A is the predominant form throughout the cycle. Heterogeneous isoform expression between the glands of the endometrium basalis and functionalis is implying region-specific responses to hormonal stimuli.

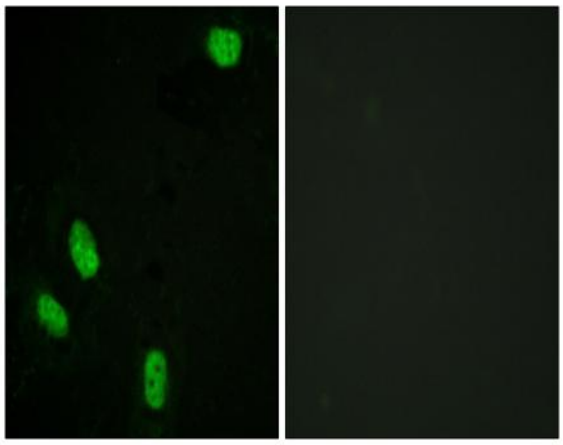
Products Images



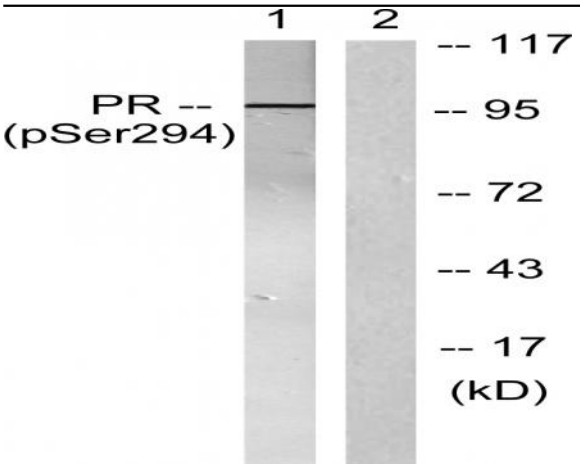
Western Blot analysis of 293 cells using Phospho-PR (S294) Polyclonal Antibody



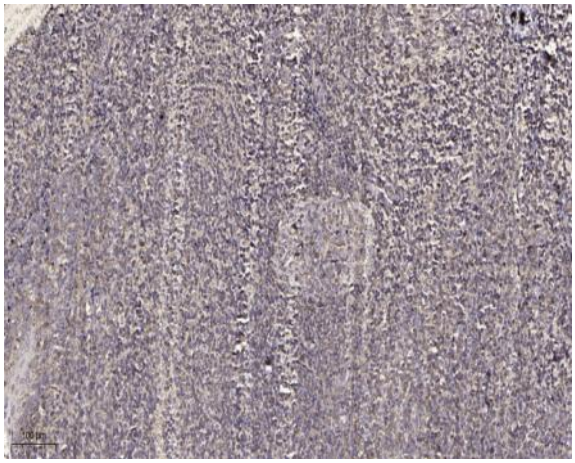
Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using Progesterone Receptor (Phospho-Ser294) Antibody



Immunofluorescence analysis of HeLa cells, using Progesterone Receptor (Phospho-Ser294) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from 293 cells treated with Etoposide 25uM 60', using Progesterone Receptor (Phospho-Ser294) Antibody. The lane on the right is blocked with the phospho peptide.



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).