

## Progesterone Receptor (Phospho-Ser294) Antibody

Catalog No: #11991



Package Size: #11991-1 50ul #11991-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

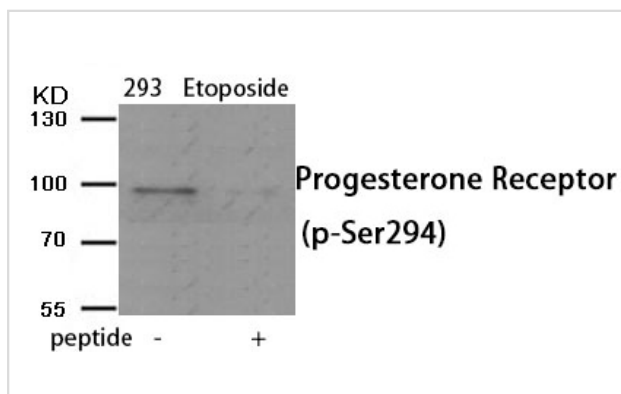
## Description

Product Name	Progesterone Receptor (Phospho-Ser294) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.
Applications	WB
Species Reactivity	Hu
Specificity	The antibody detects endogenous level of Progesterone Receptor only when phosphorylated at serine 294.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of serine 294 (G-R-S(p)-P-L) derived from Human Progesterone Receptor.
Target Name	Progesterone Receptor
Modification	Phospho
Other Names	NR3C3; PGR; PRGR; Progesterone receptor;
Accession No.	Swiss-Prot#: P06401; NCBI Gene#: 5241; NCBI Protein#: NP_000917.3
SDS-PAGE MW	99kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C/1 year

## Application Details

Western blotting: 1:500~1:1000

## Images



Western blot analysis of extracts from 293 cells treated with Etoposide using Phospho-Progesterone Receptor (Ser294) antibody #11991. The lane on the right is treated with the antigen-specific peptide.

## Background

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Progesterone receptors (PRs) are nuclear hormone receptors of the NR3C class, which also includes mineralocorticoid, glucocorticoid and androgen receptors. They exist as homodimers coupled to Hsp90 or HMGB proteins, which are shed upon activation. The major signaling pathway used by progesterone receptors is via direct DNA binding and transcriptional regulation of target genes. They can also signal by binding to other proteins, mainly with transcription factors such as NF-kappaB, AP-1 or STAT. Progesterone receptors are found in the female reproductive tract, mammary glands, brain and pituitary gland and receptor expression is induced by estrogen. Well established functions of progesterone receptors include ovulation, implantation, mammary gland development and maintenance of pregnancy. In addition, progesterone, signaling through the progesterone receptor, increases the ventilatory response of the respiratory centers to carbon dioxide and decreases arterial and alveolar PCO<sub>2</sub> in the luteal phase of the menstrual cycle and during pregnancy. The human gene encoding the progesterone receptor has been localized to 11q22.

Chung HH, Sze SK, Tay AS, Lin VC (2014) J Biol Chem 289, 2180-94

Hagan CR, Knutson TP, Lange CA (2013) Nucleic Acids Res 41, 8926-42

Wang S, et al. (2013) J Biol Chem 288, 26265-74

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Note: This product is for in vitro research use only and is not intended for use in humans or animals.