

ARG57992 anti-Progesterone Receptor antibody

Package: 100 µl
Store at: -20°C

Summary

| | |
|---------------------|---|
| Product Description | Rabbit Polyclonal antibody recognizes Progesterone Receptor |
| Tested Reactivity | Hu |
| Tested Application | ICC/IF, IHC-P, IP, WB |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | IgG |
| Target Name | Progesterone Receptor |
| Species | Human |
| Immunogen | Synthetic peptide derived from Human Progesterone receptor. |
| Conjugation | Un-conjugated |
| Alternate Names | PR; NR3C3; Nuclear receptor subfamily 3 group C member 3; Progesterone receptor |

Application Instructions

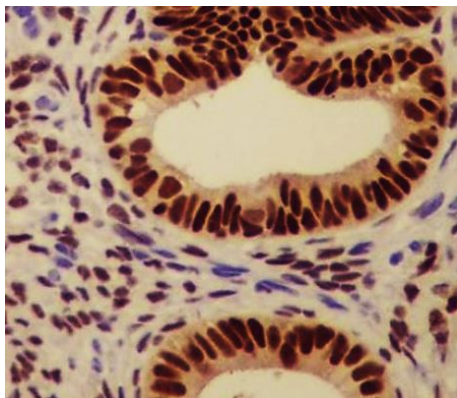
| Application table | Application | Dilution |
|-------------------|--|-----------------|
| | ICC/IF | 1:50 - 1:200 |
| | IHC-P | 1:50 - 1:200 |
| | IP | 1:50 |
| | WB | 1:1000 - 1:2000 |
| Application Note | * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist. | |
| Positive Control | T47D | |
| Observed Size | ~ 125 kDa | |

Properties

| | |
|---------------------|---|
| Form | Liquid |
| Purification | Affinity purified. |
| Buffer | PBS (pH 7.4), 150mM NaCl, 0.02% Sodium azide and 50% Glycerol. |
| Preservative | 0.02% Sodium azide |
| Stabilizer | 50% Glycerol |
| Storage instruction | For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use. |

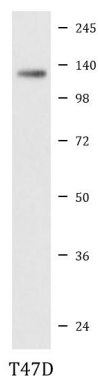
Bioinformation

| | |
|----------------|---|
| Gene Symbol | PGR |
| Gene Full Name | progesterone receptor |
| Background | <p>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 promoters 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]</p> |
| Function | <p>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.</p> <p>Isoform A: inactive in stimulating c-Src/MAPK signaling on hormone stimulation.</p> <p>Isoform 4: Increases mitochondrial membrane potential and cellular respiration upon stimulation by progesterone. [UniProt]</p> |
| Calculated Mw | 99 kDa |
| PTM | <p>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.</p> <p>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.</p> <p>Ubiquitination is hormone-dependent and represses sumoylation on the same site. Promoted by MAPK-mediated phosphorylation on Ser-294.</p> <p>Palmitoylated by ZDHHC7 and ZDHHC21. Palmitoylation is required for plasma membrane targeting and for rapid intracellular signaling via ERK and AKT kinases and cAMP generation. [UniProt]</p> |



ARG57992 anti-Progesterone Receptor antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human uterus tissue stained with ARG57992 anti-Progesterone Receptor antibody.



ARG57992 anti-Progesterone Receptor antibody WB image

Western blot: T47D cell lysate stained with ARG57992 anti-Progesterone Receptor antibody.