

## **Product datasheet for TA354207**

## OriGene Technologies, Inc.

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## **Progesterone Receptor (PGR) Rabbit Polyclonal Antibody**

**Product data:** 

**Product Type:** Primary Antibodies

Applications: IHC, WB

Recommended Dilution: WB 0.1-1 μg/ml ELISA 0.01-0.1 μg/ml IP 2-5 μg/ml IHC 2-10 μg/ml FC 5-10 μg/ml

Reactivity: Human, Mouse, Rat, Bovine

Host: Rabbit Isotype: IgG

Clonality: Polyclonal

**Immunogen:** A synthetic peptide corresponding to C-terminus of human Progesterone receptor. This

sequence is identical within human, mouse, rat, chicken, bovine and dog origins.

**Formulation:** This affinity purified antibody is supplied in sterile Phosphate buffered saline (pH7.2)

containing antibody stabilizer.

**Purification:** The Rabbit IgG is purified by Epitope Affinity Purification

**Conjugation:** Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

Predicted Protein Size: 116 kDa

**Gene Name:** progesterone receptor

Database Link: NP 000917

Entrez Gene 18667 MouseEntrez Gene 25154 RatEntrez Gene 5241 Human

P06401





Background:

The progesterone receptor (PR) is a member of the steroid receptor superfamily. PR expression indicates a responsive estrogen receptor (ER) pathway, and therefore, may predict likely response to endocrine therapy in human breast cancer. In humans, the progesterone receptor (PR) gene gives rise to multiple isoforms. The "B" (PR-B, 116kDa, 933aa) contains a proline-rich N-term (aa 1 - 566), a central DNA-binding domain (DBD) (aa 567 - 636), a nuclear localization motif (aa 637 - 644), and a hormone binding/dimerization domain (HBD) (aa 645 -933). PR-A (94 kDa, 769aa) utilizes a different start site that shortens the N-terminus by 164 amino acids. The N-terminus in both is rich in serine that is phosphorylated in response to hormone binding. In the absence of hormone, a few PR-A and -B molecules are phosphorylated at Serine 190 (S190). Hormone increases this number two-fold, providing evidence for hormone stimulation. The common Serine at 294 can only be phosphorylated on PR-B, due to a difference in N-terminal conformation. This may account for functional differences between the molecules. Alternate start sites also generate two shorter forms that lack the N-terminus: PR-C (60 kDa, 339 aa), PR-M (38 kDa, 314aa). PR-A, -B and -C are known to heterodimerize. Alternate splicing of PR-A generates at least four other isoforms. All contain aa 1 - 516 (with the N-terminus), and are either truncated or show a partial deletion of the HBD.

Synonyms: NR3C3; PR

**Protein Families:** Druggable Genome, Nuclear Hormone Receptor, Transcription Factors

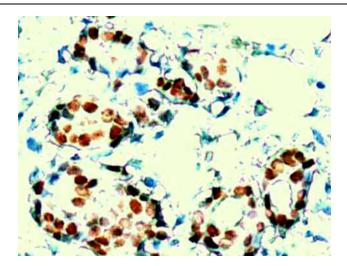
**Protein Pathways:** Oocyte meiosis, Progesterone-mediated oocyte maturation

## **Product images:**



WB: The cell lysate derived from MCF-7 was immunoprobed by Rabbit anti-PR antibody at 1:500.





Human breast cancer tissue stained with Anti-PR antibody, at 1:200 for 10 min at RT. Staining of formalin-fixed tissue requires boiling tissue sections in 10 mM Citrate Buffer, pH 6.0 for 10 min followed by cooling at RT for 20 min.