

PGR

Recombinant Human Progesterone Receptor GST

Catalog No.	CRP145A	Quantity:	2 µg
	CRP145B		5 µg
	CRP145C		10 µg

Alternate Names: PR, Nuclear receptor subfamily 3 group C member 3, NR3C3.

Description: Recombinant Human Progesterone Receptor GST Tag is a 151 aa peptide consisting of aa 412-562 fused to a GST tag.

PGR belongs to the steroid receptor superfamily and is an intracellular steroid receptor that specifically binds progesterone. The progesterone receptor is an estrogen-regulated protein. PGR mediates the physiological effects of progesterone, which plays a fundamental role in reproductive events associated with establishing and maintaining pregnancy. PGR uses 2 distinct promoters and translation start sites in the first exon to produce 2 isoforms, A & B, which differ in their molecular weight (isoform A has 165 additional amino acids at the N-terminus). The progesterone receptor has an amino and a carboxyl terminal, the regulatory domain between them, a DNA binding domain, the hinge section, and the hormone binding domain. If no hormone is bound, the carboxyl terminal inhibits transcription. Binding to a hormone stimulates a structural change, which eliminates the inhibitory action. Following the progesterone binding to the receptor, restructuring with dimerization begins and the complex enters the nucleus where it binds to DNA.

It has been proposed that expression of PGR determination indicates a responsive estrogen receptor (ER) pathway, and therefore, may predict likely response to endocrine therapy in human breast cancer. A number of studies have shown that PGR determination provides supplementary information to ER, both in predicting response to endocrine therapy and estimating survival. PGR has proved superior to ER as a prognostic indicator in some studies.

GeneID: 5241

Source: *E. coli*

Molecular Weight: 43 kDa by SDS-PAGE (including the GST tag).

Formulation: Sterile filtered clear solution containing 50 mM Tris-HCl, pH7.5, + 10 mM L-glutathione (reduced).

Purification: The PGR is purified by proprietary chromatographic techniques.

Storage & Stability: Store vial at -20°C to -80°C. When stored at the recommended temperature, this protein is stable for 12 months. **Please prevent freeze-thaw cycles.**

Applications: ELISA, Inhibition Assays, Western blotting

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

