



Product Data Sheet

Cat # RP-963

Recombinant Human PGR

Size: 2 ug

The progesterone receptor (PR, also known as NR3C3 or nuclear receptor subfamily 3, group C, member 3), is a protein found inside cells. It is activated by the steroid hormone progesterone. In humans, PR is encoded by a single PGR gene residing on chromosome 11q22, it has two main forms, A and B, that differ in their molecular weight.

The progesterone receptor (PgR) 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.

Source: Progesterone Receptor Human Recombinant (a.a. 412-562) expressed in E.coli,

shows a 43 kDa SDS-PAGE (including GST tag) and is purified by chromatographic techniques. It is supplied in 50mM Tris-HCl, pH7.5, 10mM L-glutathione (reduced).

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

Application:

- ELISA
- Inhibition Assays
- Western Blotting

This item is for in vitro research only.

Related items from ADI

Catalog#	Prod Description		
RP-963	Recombinant	(E.Coli)	Human Progesterone Receptor
PR11-M	Monoclonal	Anti-Human	Progesterone Receptor protein (PR) IgG
PR12-M	Monoclonal	Anti-Human	Progesterone Receptor protein (PR) IgG #2
MA-20107	Mouse	Monoclonal	Anti-Human to progesterone receptor (PR)
MA-20205	Mouse	Monoclonal	Anti-Human progesterone receptor (PGR)
MA-20268	Mouse	Monoclonal	Anti-Human progesterone receptor (PGR)
RP-963-Hu-Progesterone-Receptor			151229SV