

# **PGR Antibody**

Purified Mouse Monoclonal Antibody Catalog # AO1170a

### **Specification**

# **PGR Antibody - Product Information**

Application E
Primary Accession P06401
Reactivity Human
Host Mouse
Clonality Monoclonal
Isotype IgG2b

**Description** 

PGR: progesterone receptor. 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 promotors and translation start sites in the first exon to produce two isoforms, A and B. The two isoforms are identical except for the additional 165 amino acids found in the N-terminus of isoform A only, and mediate their own response genes and physiologic effects with little overlap. The location of transcription initiation for isoform B has not been clearly determined.

#### **Immunogen**

Purified recombinant fragment of PGR (aa731-909) expressed in E. Coli. <br/> <br/> <br/> />

# **Formulation**

Ascitic fluid containing 0.03% sodium azide.

### **PGR Antibody - Additional Information**

**Gene ID 5241** 

#### **Other Names**

Progesterone receptor, PR, Nuclear receptor subfamily 3 group C member 3, PGR, NR3C3

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

# **Precautions**

PGR Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# **PGR Antibody - Protein Information**

**Name PGR** 

Synonyms NR3C3



# **Function**

The steroid hormones and their receptors are involved in the regulation of eukaryotic gene expression and affect cellular proliferation and differentiation in target tissues. Depending on the isoform, progesterone receptor functions as a transcriptional activator or repressor.

#### **Cellular Location**

Nucleus. Cytoplasm. Note=Nucleoplasmic shuttling is both hormone- and cell cycle-dependent. On hormone stimulation, retained in the cytoplasm in the G(1) and G(2)/M phases [Isoform 4]: Mitochondrion outer membrane

#### **Tissue Location**

In reproductive tissues the expression of isoform A and isoform B varies as a consequence of developmental and hormonal status. Isoform A and isoform B are expressed in comparable levels in uterine glandular epithelium during the proliferative phase of the menstrual cycle. Expression of isoform B but not of isoform A persists in the glands during mid-secretory phase. In the stroma, isoform A is the predominant form throughout the cycle. Heterogeneous isoform expression between the glands of the endometrium basalis and functionalis is implying region-specific responses to hormonal stimuli

# **PGR Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

#### **PGR Antibody - Images**

### **PGR Antibody - References**

1. Cancer Sci. 2006 Dec;97(12):1308 2. Mol Endocrinol. 2006 Nov;20(11):2656-70.