

# Data Sheet

# Progesterone Receptor

mouse monoclonal antibody

**NCL-PGR-312/2**

<b>Intended Use</b>	<b>FOR RESEARCH USE ONLY.</b>
<b>Specificity</b>	Human progesterone receptor. A and B forms are detected in Western blotting procedures but only the A form is detected in immunohistochemical procedures. This may be the result of the epitope being inaccessible in the folded B form of the progesterone receptor protein.
<b>Clone</b>	16
<b>Ig Class</b>	IgG1
<b>Antigen used for immunisations</b>	Prokaryotic recombinant protein corresponding to the N-terminal region of the A form of the human progesterone receptor.
<b>Hybridoma partner</b>	Mouse myeloma (p3-NS1-Ag4-1).
<b>Preparation</b>	Lyophilised tissue culture supernatant containing 15mM sodium azide. Reconstitute with the volume of sterile distilled water indicated on the vial label.
<b>Effective on frozen tissue</b>	Yes. Optimum fixative Zamboni's, 10 minutes at 25°C (see Stefanini <u>et al.</u> , 1967).
<b>Effective on paraffin wax embedded tissue</b>	Yes (using the high temperature antigen unmasking technique: see overleaf).
<b>Recommendations on use</b>	Immunohistochemistry: Typical working dilution 1:100 - 1:200. High temperature antigen unmasking technique. 60 minutes primary antibody incubation at 25°C. Standard ABC technique.  Western Blotting: Typical working dilution 1:20,000 - 1:40,000.
<b>Positive Controls</b>	<b>Immunohistochemistry</b> - Endometrium. <b>Western Blotting</b> - T47D cell line.
<b>Staining pattern</b>	Nuclear
<b>Storage and stability</b>	Store unopened lyophilised antibody at 4°C. Under these conditions, there is no significant loss in product performance up to the expiry date indicated on the vial label. The reconstituted antibody is stable for at least two months when stored at 4°C. For long term storage, it is recommended that aliquots of the antibody are frozen at -20°C (frost-free freezers are <b>not</b> recommended). Repeated freezing and thawing must be avoided. Prepare working dilutions on the day of use.

## General Overview

The human progesterone receptor (PR) is expressed as two isoforms, PRA (94kD) and PRB (114kD), which function as ligand-activated transcription factors. These two isoforms are transcribed from distinct estrogen receptor (ER)-inducible promoters within a single copy PR gene. The PRA form is a truncated version of the PRB form, lacking the first 164 N-terminal amino acids. In humans, PRA acts as a transdominant repressor of the transcriptional activity of PRB, glucocorticoid receptor, ER, androgen receptor and mineralocorticoid receptor. PRB functions mainly as a transcriptional activator. PRB is expressed strongly in endometrial glandular and stromal nuclei in the proliferative phase of the menstrual cycle and weakly during the secretory phase and early pregnancy.

## General References

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