MONOCLONAL ANTI-PROGESTERONE RECEPTOR 
CLONE HPRA2 + HPRA3 
Purified Mouse Immunoglobulin

Product Number P 3367

Product Description
Monoclonal Anti-Progesterone Receptor (PR) (mouse IgG) is derived from the hybridoma produced by the fusion of mouse myeloma HL-1 Friendly cells with splenocytes from RBF/DN mice immunized with PR from human endometrial carcinoma (EnCa 101) grown in athymic mice. The antibody is purified by protein G chromatography.

Monoclonal Anti-Progesterone Receptor specifically recognizes two proteins in humans, horse and pig: 116 kDa (triplet) and 81 kDa (singlet), identified as the hormone-binding high molecular weight (PRB) and low molecular weight forms (PRA) of PR. The antibody has been used in immunoblotting, immunoprecipitation, immunofluorescence, and immunohistochemistry with frozen or formalin-fixed paraffin-embedded tissue sections.

Progesterone and other progestins are secreted by the corpus luteum during the menstrual cycle and play a critical role in the early maintenance of the endometrial lining during pregnancy. Progesterone regulates reproductive function through two intracellular receptors: an amino-terminal truncated form known as progesterone receptor-A (PRA) and progesterone receptor-B (PRB). These arise from a single gene and function as transcriptional regulators of progesterone-responsive genes. PRB functions as a transcriptional activator, while PRA is transcriptionally inactive due to its inability to efficiently recruit coactivators (GRIP1 and SRC-1) upon agonist binding. PRA functions as a strong ligand-dependent transdominant repressor of steroid hormone receptor transcriptional activity. An inhibitory domain (ID) within PR, which is necessary for transrepression by PRA, has been identified. It is present within both human PR isoforms, but is functionally active only in PRA. Ser294 is located within this inhibitory domain. Progesterone receptors are expressed in normal human mammary tissue, endometrium, hypothalamus and in cancers of the breast and astrocytomas.1,4

Reagent
Monoclonal Anti-Progesterone receptor is supplied as a solution in phosphate buffered saline, pH 7.4, with 0.08% sodium azide as a preservative.

Precautions and Disclaimer
Due to the sodium azide content, a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazards and safe handling practices.

Storage/Stability
Store at –20 °C. Upon initial thawing freeze the solution in working aliquots for extended storage. Avoid repeated freezing and thawing to prevent denaturing the antibody. Do not store in a frost-free freezer. The antibody is stable for at least 12 months when stored appropriately. Working dilutions should be discarded if not used within 12 hours.

Product Profile
The recommended working concentration of 2 to 4 µg/ml is determined by immunohistochemical staining using Anti-PR on formalin-fixed paraffin-embedded human breast carcinoma tissue sections. For immunoblotting, the recommended working concentration is 1 µg/ml and for immunoprecipitation, 2 µg per mg of protein lysate is suggested.

Note: In order to obtain best results using different techniques and preparations we recommend determining optimal working concentration by titration.

References