Anti-Prostaglandin E$_2$ Receptor
produced in rabbit, affinity isolated antibody

Catalog Number P7747

Synonym: Anti-EP$_2$

Product Description
Anti-Prostaglandin E$_2$ Receptor is produced in rabbit using as immunogen a synthetic peptide conjugated to KLH. The peptide corresponds to the extracellular N-terminus of human prostaglandin E$_2$ receptor. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

The antibody specifically recognizes human prostaglandin E$_2$ receptor by immunohistochemistry with formalin-fixed, paraffin-embedded tissues. Not tested for other uses. The immunizing peptide has 83% homology with mouse and rat genes. Other species reactivity has not been confirmed.

The most biologically active prostaglandin, PGE$_2$, is synthesized from arachidonic acid through the cyclooxygenase pathway. Many cell types produce PGE$_2$, including epithelial cells, fibroblasts and macrophages. PGE$_2$ modulates immune functions and regulates the sleep-wake cycle. PGE$_2$ induces cervical ripening and parturition, mediates bradykinin-induced vasodilation, and regulates adenylyl cyclase. Tumor cells that over-express cyclooxygenase 2 display increased invasiveness, angiogenesis, and resistance to apoptosis that may be due to the PGE$_2$-induced expression of angiogenic factors and stabilization of the anti-apoptotic protein, survivin.

Prostaglandin E$_2$ Receptor expression has been documented in eye, ovary, uterus, and vessels. ESTs have been isolated from bone marrow and heart/melanocyte/uterus libraries

Reagents
Supplied as a solution of 1 mg/mL in phosphate buffered saline, pH 7.7, containing 0.01% sodium azide as a preservative.

Precautions and Disclaimer
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability
For continuous use, store at 2-8 °C for up to one month. For extended storage, freeze in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile
Immunohistochemistry: a minimum working concentration of 2 µg/mL was determined using ovarian granulosa cells.

Note: In order to obtain the best results in various techniques and preparations, we recommend determining optimal working dilutions by titration.

References

This product is manufactured by MBL International Corporation

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