Product Information

Anti-Proteinase-Activated Receptor 2
produced in rabbit, affinity isolated antibody

Catalog Number P8747

Product Description

Anti-Proteinase-Activated Receptor 2 (PAR$_2$) is produced in rabbit using as immunogen a synthetic peptide conjugated to KLH. The peptide corresponds to the extracellular N-terminus of human proteinase-activated receptor 2. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-Proteinase-Activated Receptor 2 specifically recognizes human proteinase-activated receptor 2 by immunohistochemistry with formalin-fixed, paraffin-embedded tissues. Not tested for other uses. The immunizing peptide has 60% homology with the mouse and rat genes. Other species reactivity has not been confirmed.

Proteinase-activated receptors (PARs) are G protein-coupled receptors that are activated by the cleavage of their N-terminal domain by proteinases. The proteolytic cleavage of the N-terminal region of PARs unmasks a new N-terminal sequence that acts as a tethered ligand that binds and activates the receptor itself. Four members of the PAR family have been cloned. PAR$_1$, PAR$_3$, and PAR$_4$ are activated by thrombin, and PAR$_2$ is activated by trypsin or by human mast cell tryptase.

PAR$_2$, also known as Coagulation Factor II Receptor-Like 1 (F2RL1), is known to play a critical role in acute and chronic inflammation. PAR$_2$ expression is substantially upregulated in inflamed tissues of the joint. Proinflammatory effects such as prolonged joint swelling and PAR$_2$ agonists also induce synovial hyperemia. PAR$_2$ activation could contribute to several early events in the inflammatory reaction, including leukocyte rolling, adherence, and recruitment, by a mechanism dependent on platelet activating factor release.

PAR$_2$ expression has been documented in the periphery. ESTs have been isolated from adrenal, brain, breast, heart/melanocyte/uterus, kidney, lung, and vessel libraries.

Reagent

Supplied as a solution of 1 mg/mL in PBS, pH 7.7, containing 0.01% sodium azide.

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. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunohistochemistry: a minimum working concentration of 3 µg/mL is determined using pancreatic tissues.

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

References


This product is manufactured by MBL International Corporation

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