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ProductInformation

Monoclonal Anti-SLIPR/MAGI-3
Clone SLP-32
Purified Mouse Immunoglobulin

Product Number **S 4191**

Product Description

Monoclonal Anti- SLIPR/MAGI-3 (mouse IgG1 isotype) is derived from the SLP-32 hybridoma produced by the fusion of mouse myeloma cells and splenocytes from mice immunized with the C-terminal SLIPR protein fused to GST (amino acids 421-785 of rat SLIPR). The isotype is determined using Sigma ImmunoType™ Kit (Product Code ISO-1) and by a double diffusion immunoassay using Mouse Monoclonal Antibody Isotyping Reagents (Product Code ISO-2).

Monoclonal Anti-SLIPR/MAGI-3 recognizes rat SLIPR/MAGI-3 (approx. 160 kDa). The product may be used in ELISA, immunoblotting, and immunocyto-chemistry.

The MAGUK family (Membrane-Associated Guanylate Kinase) family of proteins, whose prototypic member is PS95, is characterized by the presence of multi-PDZ and SH3 domains, and a single region of homology to the *Saccharomyces cerevisiae* guanylate kinase (GuK) domain.[1] All MAGUKs studied to date, localize to regions of cell-cell contact, such as tight junctions in epithelial cells and synaptic junctions in neurons. They are believed to be involved in the assembly of multiprotein complexes via their protein-protein interaction domains.[2] Using different screening assays, three novel closely related MAGUK proteins were isolated: MAGI-1/BAP1, MAGI-2/ r-SCAM/ARIP, and SLIPR/MAGI-3. In these proteins, the SH3 domains are replaced with a WW domain. Different components interacting with these proteins in a complex have been identified.[3-8]

SLIPR/MAGI-3 was shown to interact with the protein phosphatase PTEN through one of its PDZ domains.[8] PTEN is a tumor suppressor which acts through the PI3 Kinase pathway; loss of PTEN results in enhanced AKT/PKB kinase activation and resistance to apoptosis.[9] Apparently, MAGI-3 serves to position the phosphatase to specific subcellular locations that are involved in the regulation of cell proliferation and survival. More recently, it was shown that MAGI-2 also interacts with PTEN.[7]

Reagent

Monoclonal Anti-SLIPR/MAGI-3 is supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 1% bovine serum albumin and 15 mM sodium azide.

Antibody Concentration: Approx. 1.5 mg/ml

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

For continuous use, store at 2-8 °C for up to one month. For prolonged storage, freeze in working aliquots at –20 °C. Repeated freezing and thawing is not recommended. Storage in frost-free freezers is also not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilutions should be discarded if not used within 12 hours.

Product Profile

A minimum working concentration of 1-2 µg/ml is determined by immunoblotting using rat brain extract.

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

References

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