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ProductInformation

MONOCLONAL ANTI-PAXILLIN
Clone PXC-10
Mouse Ascites Fluid

Product No. **P 1093**

Product Description

Monoclonal Anti-Paxillin (mouse IgG1 isotype) is derived from the PXC-10 hybridoma produced by the fusion of mouse myeloma cells and splenocytes from an immunized mouse. A carboxy-terminal part of recombinant chicken paxillin (a.a. 305-559) was used as the immunogen. 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-Paxillin recognizes an epitope located in the LIM1 domain of the paxillin molecule. The product reacts in immunoblotting (68 kDa and a lower band at approx. 40 kDa) and in immunocytochemistry. Cross-reactivity has been observed with human, bovine, hamster, rat and chicken paxillin.

Monoclonal Anti-Paxillin may be used for the localization of paxillin using various immunochemical assays such as immunoblot and immunocytochemistry. Cellular adhesion to the extracellular matrix is critically involved in many processes including normal and transformed cell growth, migration, metastasis, lymphocyte extravasation and also in force transmission during muscle contraction.[1-4] Paxillin (68 kDa), is a cytoskeletal component found in the focal adhesions at the ends of actin stress fibers, but not in adherens junctions of the cells. Paxillin interacts with several proteins including members of the *src* family of tyrosine kinases, the transforming protein *v-crk*, the cytoskeletal protein vinculin, and the tyrosine kinase, focal adhesion kinase (FAK). This interaction has suggested a function for paxillin as a molecular adaptor, responsible for the recruitment of structural and signaling molecules to focal adhesions. The paxillin molecule has a single binding site for vinculin, and at least two binding sites for FAK, that are separated by an intervening sequence of 100 amino acids.[1] Upon transformation by RSV, 20-30% of the paxillin molecules are phosphorylated on tyrosine. In addition, the cellular distribution of paxillin becomes more diffuse, suggesting that phosphorylation of paxillin may have a role in the disassembly of focal adhesions and stress fibers during transformation.[5] The availability of monoclonal antibody reacting specifically with paxillin enables the subcellular detection and localization of paxillin.

Reagents

The product is provided as ascites fluid with 15 mM sodium azide as a preservative.

Precautions

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

Product Profile

A minimum working dilution of at 1:500 is determined by immunoblotting using a cultured human cell line extract.

In order to obtain best results, it is recommended that each user determine the optimal working dilution for individual applications by titration assay.

Storage

For continuous use, store at 2-8 °C for up to one month. For extended storage freeze in working aliquots. Repeated freezing and thawing is not recommended. Storage in "frost-free" freezers is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use.

References

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4. Hynes, R.O., Cell, **69**, 11 (1992).
5. Turner, E.C., et al., J. Cell iol.,**111**,1059(1990).

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