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## Product Information

### MONOCLONAL ANTI-VINCULIN

Clone VIN-11-5

Mouse Ascites Fluid

Product No. **V4505**

#### Product Description

Monoclonal Anti-Vinculin (mouse IgG1 isotype) is derived from the hybridoma produced by the fusion of mouse myeloma cells and splenocytes from an immunized mouse. Purified vinculin from chicken gizzard smooth muscle 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-Vinculin is immunospecific for vinculin as determined by indirect immunofluorescent staining or immunoblotting. Specific staining occurs at cell-substrate focal contacts on membranes of cultured cells.

The antibody reacts best with cultured chicken fibroblasts, but good labeling may also be obtained with human, bovine, and mouse cells.

Cytoskeletal filaments are associated with the plasma membrane in areas of cell contact. In particular it has been shown that bundles of actin containing microfilaments are attached to the cytoplasmic faces of the membrane in cell-substrate focal contacts (adhesion plaques) of cultured fibroblasts. Besides actin, which is the major constituent of microfilaments, other actin related proteins are found close to or in the area of microfilament membrane association in contact regions. Vinculin is associated with the cytoplasmic aspect of contact areas close to the membrane. It has been suggested that vinculin is a possible link between ends of the bundles of actin filaments and the plasma membrane. It has also been proposed that vinculin may be involved in the transmembrane induction of actin bundle formation.

Monoclonal Anti-Vinculin may be used for the immunocytochemical localization of vinculin using

indirect immunofluorescent labeling of cultured fibroblasts or for specific identification of the vinculin band in immunoblotting techniques.

#### 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 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.

#### Product Profile

A minimum working dilution of 1:50 is determined by indirect immunofluorescent labeling of cultured chicken fibroblasts.

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

#### Storage

For continuous use, store at 2-8 °C for a maximum of one month. For extended storage, the solution may be frozen 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

1. Volberg, T., et al., J. Cell Bio., **102**, 1832 (1986).
2. Gimona, M., et al., FEBS Letters, **274**, 159 (1990).

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