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Product Information

MONOCLONAL ANTI- α -ACTININ

Clone BM-75.2

Mouse Ascites Fluid

Product No. **A 5044**

Product Description

Monoclonal Anti- α -Actinin (mouse IgM isotype) is derived from the hybridoma produced by the fusion of mouse myeloma cells and splenocytes from an immunized mouse. The cytoskeletal fraction of bovine mammary gland epithelium (BMGE) cultured cells 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- α -Actinin specifically stains α -actinin in cell cultures using indirect immunofluorescent labeling. The antibody reacts best with chicken fibroblasts, although good immunofluorescent labeling may also be obtained with mouse or human cells.

Monoclonal Anti- α -Actinin may be used for immunofluorescent localization of α -actinin in cultured cells and tissues, immunofluorescent labeling of skeletal muscle (normal and pathological) to study its organizational state, studies of membrane anchorage sites, and immunochemical identification of α -actinin by immunoblotting analysis.

α -Actinin is an actin binding protein present in both muscle and non-muscle cells. It has a molecular weight of 100,000 daltons and forms dimers in solution. In normal skeletal muscle α -actinin is associated with the z-discs that define muscle sarcomeres. In smooth muscle α -actinin has been detected in dense bodies and plaques characteristic of the tissue. Immunofluorescent labeling of a large variety of cells using antibody

to α -actinin reveals extensive association of the proteins with actin containing stress fibers and in particular with their membrane bound termini.

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

The working dilution was determined by indirect immunofluorescent labeling of cultured chicken fibroblasts.

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

Storage

For continuous use, store at 2-8 °C for up to 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.

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