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Product Information

Monoclonal Anti-Cellular Fibronectin

Clone FN-3E2

Mouse Ascites Fluid

Product Number **F 6140**

Product Description

Monoclonal Anti-Cellular Fibronectin (mouse IgM isotype) is derived from the hybridoma produced the fusion of mouse myeloma cells and splenocytes from immunized mice. Antigens released in culture from a breast cancer cell line were used as 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-Cellular Fibronectin labels fibronectin in the pericellular extracellular matrix of cultured chicken fibroblasts. It also labels cellular fibronectin in chicken embryo, mouse and human fibroblasts grown in tissue culture using in indirect immunofluorescent labeling technique. The antibody may also be used in immunoperoxidase or immunofluorescent labeling on frozen human tissue preparations. In immunoblotting, Monoclonal Anti-Cellular Fibronectin localizes the 240 kDa bands of cellular fibronectin in both its native and denatured forms.

Fibronectin is an extracellular matrix protein composed of two nearly identical disulfide-bound polypeptides with typical molecular weights of 220 - 240 kDa. Cellular fibronectin is structurally and antigenically similar to cold insoluble globulin from plasma and polyclonal antibodies to either form usually crossreact. Analysis of the fibronectin molecule indicates that it contains several functionally and structurally distinct domains, which may bind to cell surfaces, collagen, heparin, etc. Numerous studies have shown the fibronectin may enhance cell adhesion and spreading and affect the routes of cell migration both *in vivo* and in culture. It has been shown that upon malignant transformation many cells lose their surface bound fibronectin. Immunohistochemical experiments have shown the presence of cellular fibronectin in sections of human malignant tumors indicating that at least part of

the fibronectin in such tumors is not derived from the plasma but is produced locally.

Monoclonal Anti-Cellular Fibronectin may be used to specifically localize fibronectin in human cell culture and in tissue sections by immunoblotting and immunohistochemical techniques. The product may also be used for immunoaffinity purification and immunoprecipitation of cellular fibronectin. This antibody can be used to modulate the functional activity of fibronectin.

Reagents

The product is provided as ascites fluid containing 0.1% sodium azide as a preservative.

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 extended storage, solution may be frozen in working aliquots. Repeated freezing and thawing is not recommended. If slight turbidity occurs upon prolonged storage, clarify by centrifugation before use.

Product Profile

A minimum working dilution of 1:400 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.

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