

Technical Bulletin

Anti-Cellular Fibronectin antibody, Mouse monoclonal

Clone FN-3E2, purified from hybridoma cell

SAB4200880

Product Description

Monoclonal Anti-Cellular Fibronectin (mouse IgM isotype) is derived from the FN-3E2 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 by ELISA using Mouse Monoclonal Antibody Isotyping Reagents (Cat. No. ISO2). The antibody is purified from culture supernatant of hybridoma cells.

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.¹ Cellular fibronectin is structurally and antigenically similar to cold insoluble globulin from plasma. Analysis of the fibronectin molecule indicates that it contains several functionally and structurally distinct domains, which may bind to cell surfaces, collagen, heparin, etc.^{2,3,4,5}. 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.⁶ It has been shown that upon malignant transformation many cells lose their surface bound fibronectin.⁷

Reagents

Supplied as a solution in 0.01 M phosphate buffered saline pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody concentration: ~1.2 mg/mL.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Safety Data Sheet 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, 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. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunoblotting:

A working concentration of 0.5-1.0 µg/mL is recommended using human foreskin fibroblast HS68 cell lysate.

Recommendation: For immunoblotting, we strongly advise diluting the antibody in PBS containing 0.5% non-fat dry milk and 0.05% Tween™ 20.

Immunofluorescence:

A working concentration of 2-4 µg/mL is determined by indirect immunofluorescent labeling of cultured human foreskin fibroblast, HS68 cells.

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

References

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