

**Anti-Fibronectin (bovine, human)  
 Mouse monoclonal antibody**

Subclass: IgG1/k

PRODUCT NO.

**CSI 005-32**

Clone: A32

PRESENTATION

Preparation: Protein-A/G purified

Content: Available in 200 µL and 1 mL size. 1 mg/mL +/- 15%. See Certificate of Analysis for details.

Solvent: 0.01 M phosphate buffer, pH 7.4, containing 0.5 M NaCl and 15 mM sodium azide

Storage: 4-8°C without exposure to light. No precautions necessary during handling.

ANTIGEN

Fibronectin is an adhesive glycoprotein with a molecular mass of 440 kDa. It is believed to be important for the formation of a provisional matrix that promotes cell adhesion and migration during wound healing. Its age-dependent increase in plasma and tissues may be accompanied in pathological states, especially in tumor growth, by its proteolytic breakdown by a number of neutral proteases. It has also shown that several of its proteolytic breakdown products exhibit unexpected and mostly harmful biological activities (1).

IMMUNOGEN

Bovine corneal endothelial cells

SPECIFICITY

CSI 005-32 is highly specific for fibronectin. There is no evidence for cross-reactivity with other connective tissue proteins (vitronectin, elastin, collagen, laminin).

CSI 005-32 cross-reacts with human fibronectin. Other species have not been tested.

EPI TOPE SPECIFICITY

Epitope is located in the 40kD Hep II heparin-binding domain, but differs from that of CSI 005-35

REACTIVITY

CSI 005-32 can be used in ELISA, Western blotting, immunoprecipitation and immunostaining of frozen PLP-fixed sections of bovine and human tissues. The antibody inhibits cell adhesion to fibronectin mediated by the heparin-binding domain. It can be used to probe fibronectin conformation and to quantitate plasma fibronectin in a sandwich ELISA with antibody CSI 005-35. In Western blotting dilution guideline of 1/100 has proved successful (1).

CULTURE MEDIUM

RPMI 1640 with 2-10% fetal calf serum

FUSION PARTNER

SP2/O

IMMUNIZATION

Female BALB/c mice immunized by intraperitoneal injection

APPLICATION

Method	Usability	References
ELISA	Yes	1, 2, 3, 4
Immunoblotting	Yes	1
Immunohistochemistry	Yes	

REFERENCES

- Underwood PA, Dalton BA, Steele JG, Bennett FA, Strike P (1992) Anti-fibronectin antibodies that modify heparin binding and cell adhesion: evidence for a new cell binding site in the heparin binding region. *J Cell Sci* 102:833-845.
- Underwood PA, Steele JG, Dalton BA (1993) Effects of polystyrene surface chemistry on biological activity of solid phase fibronectin and vitronectin, analysed with monoclonal antibodies. *J Cell Sci* 104:793-803.
- Di Girolamo N, Underwood PA, McCluskey PJ, Wakefield D (1993) Functional activity of plasma fibronectin in patients with Diabetes mellitus. *Diabetes* 42:1606-1613.
- Dalton BA, McFarland CD, Underwood PA, Steele JG (1995) Role of heparin binding domain of fibronectin in attachment and spreading of human bone derived cells. *J Cell Sci* 108:2083-2092.

**CONDITIONS**

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