bioporto DIAGNOSTICS

PRODUCT SPECIFICATION

PS-0105 v01

Anti-Fibronectin (bovine, human, chicken)

Mouse monoclonal antibody

Subclass: IgG1/k

CAT. NO. **CSI 005-17**

Clone: A17

SPECIFICITY	CSI 005-17 is highly specific for fibronectin. There is no evidence for cross-reactivity with other connective tissue proteins (vitronectin, elastin, collagen, laminin). The antibody inhibits integrin-mediated cell adhesion to the cell binding domain of fibronectin.
IMMUNOGEN	Lysed bovine corneal endothelial cells and extracellular matrix
TESTED APPLICATIONS	ELISA, WB, IHC-F, IHC-P, IP
SPECIES REACTIVITY (POSITIVE)	Bovine, human, chicken
SPECIES REACTIVITY (NEGATIVE)	Not determined
EPITOPE SPECIFICITY	Epitope is located in the 120kD cell binding fragment

PRESENTATION

Content:	Available in 400 µL and 1 mL size.1 mg/mL +/- 15%. See Certificate of Analysis for details.
Preparation:	Protein-A purified
Form:	Liquid
Solvent:	0.01 M phosphate buffer, pH 7.4, containing 0.5 M NaCl and 15 mM sodium azide
Storage:	4-8ºC without exposure to light. No precautions necessary during handling.

APPLICATION

ELISA: CSI 005-17 can be used in ELISA (1, 2, 3, 4, 5).
WB: In Western blotting a dilution guideline of 1/100 has proved successful (1).
IHC: CSI 005-17 can be used in immunostaining of frozen PLP-fixed sections of bovine and human tissues.
IP: CSI 005-17 can be used in immunoprecipitation. It can be used to probe fibronectin conformation.

TARGET

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).

REFERENCES

1. 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.
2. 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.
3. Di Girolamo N, Underwood PA, McCluskey PJ, Wakefield D (1993) Functional activity of plasma fibronectin in patients with diabetes mellitus. Diabetes 42:1606-1613.
4. 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.
5. Underwood PA, Bean PA, Mitchell SM, Whitelock JM (2001) Specific affinity depletion of cell adhesion molecules and growth factors from serum. J Immunol Methods 247:217-224.