

**Anti-Vitronectin (human)
Mouse monoclonal antibody**

Subclass: IgG2b/k

PRODUCT NO.

CSI 003-02

Clone: HV2

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, with 0.5 M NaCl and 15 mM sodium azide

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

ANTIGEN

Vitronectin is a plasma glycoprotein that circulates in the blood. Vitronectin is circulating as a mixture of both 75 kDa and 65 kDa forms. Vitronectin is a major cell adhesive glycoprotein and is a common component of extracellular matrix and plasma. It competes effectively with other plasma proteins and is often involved in cell attachment, regulation of blood coagulation and immune responses. It has similar tissue distribution to fibronectin and also its integrin receptor recognises fibronectin (2).

IMMUNOGEN

Human vitronectin purified from plasma by heparin-affinity chromatography

SPECIFICITY

CSI 003-02 is highly specific for vitronectin. There is no evidence for cross-reactivity with other connective tissue proteins (fibronectin, elastin, collagen, laminin).

CSI 003-02 is human-specific (no reactivity with cat, dog, cow, sheep, goat, pig, rabbit, horse).

EPI TOPE SPECIFICITY

The epitope is located in the connecting region. Binding can be competed selectively by a peptide comprising aa 121-133.

REACTIVITY

CSI 003-02 can be used to purify vitronectin from human plasma by affinity chromatography. It can also be used to quantitatively affinity-deplete human plasma or serum of vitronectin. It partially denatures vitronectin upon antibody binding. It binds equally well to native and denatured vitronectin and can be used to quantitate vitronectin in human plasma in a sandwich ELISA with CSI 003-08. It does not interfere with the binding of any known vitronectin ligands. CSI 003-02 also binds to vitronectin in ELISA when vitronectin is coated directly onto the microtiter well. In Western blotting a dilution guideline of 1/100 has proved successful (1,2).

CULTURE MEDIUM

RPMI 1640 with 10% fetal calf serum

FUSION PARTNER

SP2/O.

IMMUNIZATION

Female BALB/c mice immunized i.p. with immunogen diluted in saline

APPLICATION

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

REFERENCES

- Morris CA, Underwood PA, Bean PA, Sheehan M, Charlesworth JA (1994) Relative topography of biologically active domains of human vitronectin. Evidence from monoclonal antibody epitope and denaturation studies. *J Biol Chem* 269:23845-23852.
- Underwood PA, Kirkpatrick A, Mitchell SM (2002) New insights into heparin binding to vitronectin: studies with monoclonal antibodies. *Biochem J* 365:57-67.
- 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.
- www.proteinatlas.org

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