

**Anti Perlecan (bovine)  
Mouse monoclonal antibody**

Subclass: IgG1/k

PRODUCT NO.

**CSI 001-74**

PRESENTATION

Preparation: Protein-A/G purified  
 Content: Available in 200 µL and 1 mL, 1 mg/mL  
 Solvent: 0.01 M phosphate buffer, pH 7.4, with 0.5 M NaCl and 15 mM sodium azide  
 Storage: In the dark at 4-8°C

ANTIGEN

Perlecan is an extracellular matrix proteoglycan. It has a large core protein of 400-450 kDa and is often produced with heparan sulfate side chains. Perlecan is found in basement membranes where it contributes to the permeability characteristics, serves as a substrate for vascular cells and binds growth factors involved in vascular remodelling (2).

IMMUNOGEN

Bovine corneal endothelial cells

SPECIFICITY

CSI 001-74 is highly specific for perlecan. There is no evidence for cross-reactivity with other connective tissue proteins (vitronectin, fibronectin, elastin, collagen, laminin).  
 CSI 001-74 cross-reacts with human perlecan. Other species have not been tested.

EPI TOPE SPECIFICITY

Epitope is located in domain V

REACTIVITY

CSI 001-74 can be used in immunoprecipitation, ELISA and immunostaining of frozen PLP-fixed sections of bovine and human tissues. CSI 001-74 can be used in affinity chromatography, in conjunction with CSI 001-71 to separate recombinant domain I from full length perlecan.

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 | Dilution guideline | References |
|----------------------|-----------|--------------------|------------|
| ELISA                | Yes       | 1:4000             | 1          |
| Immunoblotting       | Yes       | 1:100              | 1          |
| Immunohistochemistry | Yes       | 1:100              |            |

The dilution guideline for ELISA is based on use as detection antibody on antigen coated directly onto the microtiter well. Users should determine the optimal dilutions for their own purposes.

REFERENCES

- Whitelock JM, Murdoch AD, Iozzo RV, Underwood PA (1996) The degradation of human endothelial cell-derived perlecan, and release of bound bFGF by stromelysin, plasmin and heparanases. *J Biol Chem* 271:10079-10086.
- Whitelock JM, Graham LD, Melrose J, Murdoch AD, Iozzo R, Underwood PA (1999) Human perlecan immunopurified from different endothelial cell sources has different adhesive properties for vascular cells. *Matrix Biol* 18:163-178.
- Olsen BR (1999) Life without perlecan has its problems. *J Cell Biol* 147:909-912.

**CONDITIONS**

All products are supplied on the understanding that they are for in vitro use only. The information and product are offered without guarantee as the ultimate conditions of use are beyond our control. The animals from which this product was derived have not been exposed to or inoculated with any livestock or poultry disease agents exotic to the United States or Western Europe, and did not originate from facilities where work with exotic disease agents affecting livestock or avian species is carried out.