

## **PRODUCT SPECIFICATION**

PS-0107 v01

Anti-Type V Collagen (human, dog, sheep, kangaroo, pig, rabbit, bovine)

Mouse monoclonal antibody

Subclass: IgG2a/k

CAT. NO. **CSI 006-01** 

Clone: 1E2-E4/Col5

**SPECIFICITY** 

CSI 006-01 is highly specific for type V collagen. It has been shown to have no cross-reactivity with type I, III and VI collagens by ELISA and immunoblotting. There is no evidence for cross-reactivity with other

connective tissue proteins (laminin, fibronectin, elastin).

IMMUNOGEN

Acid-digested pepsin soluble dog type V collagen

TESTED APPLICATIONS

ELISA, WB, IHC-P, IHC-F

SPECIES REACTIVITY

(POSITIVE)

Human, dog, sheep, kangaroo, pig, rabbit, bovine

SPECIES REACTIVITY

(NEGATIVE)

Mouse, rat, guinea pig, chicken

**EPITOPE SPECIFICITY** 

Not determined

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

**APPLICATION** 

ELISA: CSI 006-01 can be used for detection of collagens by ELISA. CSI 006-01 binds poorly to Collagen

V when tested in ELISA with Collagen V coated directly onto the microtiter well. **WB**: In immunoblotting CSI 006-01 detects human type V collagen only in its native triple helix form.

**IHC:** CSI 006-01 has been used successfully for immunohistology on paraffin embedded (1) and frozen unfixed sections of human (2), bovine (3) and dog (4) skin, on rabbit (1) and foetal bovine cornea (4), and of new dog tissue associated with a biomaterial implant (5). If fixation of tissue is required, acetone or

ethanol is recommended.

**TARGET** 

Type V collagen is a minor component of the connective tissue, although it is present in many different types of connective tissue. Patients with defects in the type V collagen (Ehlers-Danlos syndrome) have weakened connective tissue characterized by hyperstrechable joints and fragile, easily bruisable skin.

REFERENCES

- 1. Pollock GA, McKelvie PA, McCarty DJ, White JF, Mallari PL, Taylor HR. (2003) In vivo effects of fluoroguinolones on rabbit corneas. Clin Experiment Ophthalmol 31:517-21.
- 2. Werkmeister JA, Ramshaw JAM (1989) Monoclonal antibodies to collagens for immunofluorescent examination of human skin. Acta Derm Venereol 69:399-402.
- 3. Werkmeister JA, Ramshaw JAM (1988) The use of immunohistology in studies on connective tissue organisation in hides and skins. Das Leder 39:145-151.
- 4. Werkmeister JA, Ramshaw JAM (1991) Monoclonal antibodies to type V collagen as markers for new tissue deposition associated with biomaterial implants. J Histochem Cytochem 39:1215-1220.
- 5. Werkmeister JA, Peters DE, Ramshaw JAM (1989) Development of monoclonal antibodies to collagens for assessing host-implant interactions. J Biomed Mater Res 23(A3):273-283.

## CONDITIONS

Unless otherwise marked, all products are for research use only. Not for use in diagnostic procedures. Not for use in human therapeutic applications. For in vitro use or further manufacture only. The information and product are offered without guarantee as the ultimate conditions of use are beyond our control. The foregoing is in lieu of all warranties, expressed or implied, including implied warranties of merchantability and fitness for a particular purpose. In no event shall BioPorto Diagnostics A/S be responsible for loss of profits or indirect consequential losses resulting from use of its products.