

Anti-Type III Collagen (human, dog, rat, kangaroo)

Mouse monoclonal antibody

Subclass: IgG₁/k

CAT. NO.

CSI 007-01

Clone: 1E7-D7/Col3

SPECIFICITY	CSI 007-01 is highly specific for type III collagen. It has been shown to have no cross-reactivity with type I and V 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 human type III collagen
TESTED APPLICATIONS	ELISA, WB, IHC-F
SPECIES REACTIVITY (POSITIVE)	Human, dog, rat, kangaroo
SPECIES REACTIVITY (NEGATIVE)	Calf, sheep
EPITOPE SPECIFICITY	Epitope is located approximately 100nm from the N-terminal of the molecule

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 007-01 can be used for detection of collagens by ELISA.
WB: In immunoblotting CSI 007-01 detects type III collagen only in its native triple helix form.
IHC: CSI 007-01 has been used successfully for immunohistology on frozen unfixed sections of human (1) and kangaroo (2) skin, and of new dog tissue associated with biomaterial implants (3, 4). If fixation of tissue is required, acetone or ethanol is recommended (1, 2, 3, 4).
Please consult www.proteinatlas.org

TARGET

Type III collagen is present in the walls of arteries, intestines and the uterus, where it strengthens the connective tissue. Patients with defects in the type III collagen (ex. Ehlers-Danlos syndrome) are at risk of rupture of major arteries or the intestine.

REFERENCES

1. Werkmeister JA, Ramshaw JAM (1989) Monoclonal antibodies to collagens for immunofluorescent examination of human skin. *Acta Derm Venereol* 69:399-402.
2. Stephens LJ, Werkmeister JA, Tebb TA, Ramshaw JAM (1991) Identification of type III collagen from kangaroo skin. *Das Leder* 42:41-44.
3. 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.
4. Werkmeister JA, Glattauer V, Tebb TA, Ramshaw JAM, Edwards GA, Roberts G (1991) Structural stability of long-term implants of a collagen-based vascular prosthesis. *J Long Term Eff Med Implants* 1:107-119

CONDITIONS

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