

BP8034S**Polyclonal Antibody to Procollagen Type III - Purified**

Alternate names:	Collagen, Pro-Collagen
Quantity:	0.1 ml
Concentration:	~1.0 mg/ml (after reconstitution)
Background:	Collagens consist in a family of highly specialized glycoproteins of which at least 16 genetically distinct types are known to date. The basal unit of a collagen molecule consists in a triple-helical structure formed by 3 alpha-chains. Predominant amino acids are glycine, proline and hydroxyproline. Regularly also lysines and hydroxylysines occur, which are responsible for cross-linkage and glycosylation of the protein chains. Different composition of alpha-chains and different glycosylation contribute to the high variability of collagens in different tissues and organs. Type III collagen is an alpha1(III)-trimer, MW 95 kDa, which forms 67 nm cross-banded fibrils. Typically it can be observed in skin, cartilage and vitreous body.
Host:	Rabbit
Immunogen:	Purified Human Procollagen type III C-terminal and N-terminal PIIIICP separated.
Format:	State: Lyophilized purified Ig fraction Purification: Affinity Chromatography Buffer System: PBS without BSA or preservatives Reconstitution: Restore with 0.1 ml sterile distilled water.
Applications:	RIA: > 1/200. ELISA: 1/100-1/200 (OD ≥ 500). Immunofluorescence (indirect, 1/40 on Frozen tissues). Immunohistochemistry on Frozen and Paraffin Embedded Tissue Sections: 1/500. <i>Pre-treatment:</i> After removing Paraffin pre-treat with 0.2% Hyaluronidase (approx. 300 U/mg) in TBS, 15 min at 37°C, then block unspecific binding with blocking serum or 3% BSA in TBS and perform blocking of endogen Peroxidase with 1% H ₂ O ₂ in TBS, if necessary. <i>Incubation Time:</i> 60 min at room temperature or overnight at 2-8°C. <i>Positive Control:</i> Human or Bovine Skin and Liver. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	Human and Bovine Pro-Collagen Type III (100%). Human and Bovine Pro-Collagen Typ I and Collagen Typ I <0.1% (RIA at 1/200 dilution). Species: Human, Bovine (and Porcine). Other species not tested.
Storage:	Store lyophilized at 2-8°C for 6 months or at -20°C long term. After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

Product Citations:**Purchased from Acris:**

1. Fronczek J, Lulf R, Ibrahim Korkmaz H, Witte BI, van de Goot FR, Begieneman MP, et al. Analysis of morphological characteristics and expression levels of extracellular matrix proteins in skin wounds to determine wound age in living subjects in forensic medicine. *Forensic Sci Int.* 2015 Jan;246:86-91. doi: 10.1016/j.forsciint.2014.11.013. Epub 2014 Nov 22. PubMed PMID: 25485947.

General Readings:

1. Trinchet JC, Hartmann DJ, Pateron D, Munz-Gotheil C, Callard P, Ville G, et al. Serum type I collagen and N-terminal peptide of type III procollagen in patients with alcoholic liver disease: relationship to liver histology. *Alcohol Clin Exp Res.* 1992 Apr;16(2):342-6. PubMed PMID: 1590556.

2. Farjanel J, Hartmann DJ, Guidet B, Luquel L, Offenstadt G. Four markers of collagen metabolism as possible indicators of disease in the adult respiratory distress syndrome. *Am Rev Respir Dis.* 1993 May;147(5):1091-9. PubMed PMID: 8484615.