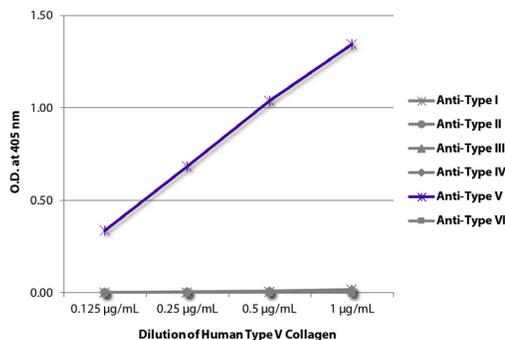




## Human Type V Collagen

Cat. No.	Format	Size
1270-01	Purified Protein - Lyophilized	0.1 mg
1270-01S	Purified Protein - Solution	0.25 mg



ELISA plate was coated with serially diluted Human Type V Collagen (SB Cat. No. 1270-01S). Purified collagen was detected with Goat Anti-Type I Collagen-BIOT (SB Cat. No. 1310-08), Goat Anti-Type II Collagen-BIOT (SB Cat. No. 1320-08), Goat Anti-Type III Collagen-BIOT (SB Cat. No. 1330-08), Goat Anti-Type IV Collagen-BIOT (SB Cat. No. 1340-08), Goat Anti-Type V Collagen-BIOT (SB Cat. No. 1350-08), and Goat Anti-Type VI Collagen-BIOT (SB Cat. No. 1360-08) followed by Streptavidin-HRP (SB Cat. No. 7100-05).

### Overview

<b>Source</b>	Placental villi
<b>Purification</b>	Controlled and limited pepsin digestion followed by selective salt precipitation
<b>Purity</b>	> 90% by SDS-PAGE
<b>Alternate Name(s)</b>	COL5A1, COL5A2, COL5A3

### Description

Collagen is the main structural protein in the extracellular space and is the most abundant protein in the ECM. Collagens are divided into two classes - fibril (types I, II, III, V) and non-fibril (types IV, VI). Type V collagen is a minor connective tissue component of nearly ubiquitous distribution. Type V collagen mutations are associated with Ehlers-Danlos syndrome. Type V collagen is broadly expressed as a two  $\alpha 1(V)$  chains and one  $\alpha 2(V)$  chain heterotrimer but also as a  $\alpha 1(V)$ ,  $\alpha 2(V)$ , and  $\alpha 3(V)$  heterotrimer in pancreatic islets, adipose tissue, and skeletal muscle.

### Applications

ELISA – Quality tested <sup>1-3</sup>  
 SDS-PAGE – Quality tested  
 Thermal Stability Studies – Reported in literature <sup>4</sup>  
 Coating Material for –  
     Adhesion Studies – Reported in literature <sup>2-3</sup>  
     ECM Interaction Studies – Reported in literature <sup>5,6</sup>

### Handling and Storage

- The purified protein is supplied as a solution of 0.25 mg collagen in 0.5 mL of 500 mM acetic acid or 0.1 mg collagen lyophilized from 500 mM acetic acid. Store at 2-8°C.
- Reconstitute lyophilized protein in 500 mM acetic acid.
- Reagents are stable for the period shown on the label if stored as directed.

### Warning

Reagents contain acetic acid. Please refer to product specific SDS.

**For Research Use Only. Not for Diagnostic or Therapeutic Use.**

## References

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5. Bidanset DJ, Guidry C, Rosenberg LC, Choi HU, Timpl R, Hook M. Binding of the proteoglycan decorin to collagen type VI. *J Biol Chem.* 1992;267:5250-6. (Coat, ECM Interaction Studies)
6. Hocking AM, Strugnell RA, Ramamurthy P, McQuillan DJ. Eukaryotic expression of recombinant biglycan. Post-translational processing and the importance of secondary structure for biological activity. *J Biol Chem.* 1996;271:19571-7. (Coat, ECM Interaction Studies)

In accordance with current Good Manufacturing and Good Laboratory Practices (cGMP/cGLP), any protein of human blood origin should be handled pursuant to your organization's documented safety procedures and as if it is capable of transmitting infection. This product has **NOT** been tested for viral, bacterial, or other infectious agents such as, but not limited to, HIV, HbsAg, and HCV.

TB1270-01

26-Feb-20

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