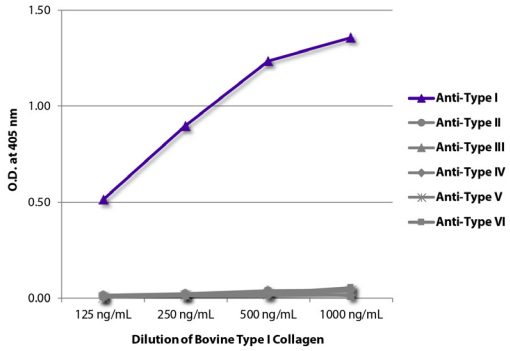
SouthernBiotech

Bovine Type I Collagen

Cat. No.	Format	Size
1200-02	Purified Protein - Lyophilized	0.25 mg
1200-02S	Purified Protein - Solution	0.5 mg



ELISA plate was coated with serially diluted Bovine Type I Collagen (SB Cat. No. 1200-02). 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

Source Placental villi
Purification Controlled and limited pepsin digestion followed by selective salt precipitation
Purity > 90% by SDS-PAGE
Alternate Name(s) COL1A1, COL1A2

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 I collagen is the most abundant collagen and is expressed in almost all connective tissues including skin, tendon, and bone tissue. It is also the predominant component of the interstitial matrix. Type I collagen mutations are associated in a range of diseases including osteogenesis imperfecta and Ehlers–Danlos syndrome. Type I collagen consists of two α1(I) chains and one α2(I) chain.

Applications

ELISA – Quality tested
SDS-PAGE – Quality tested
SPR – Reported in literature [2]
Coating Material for –
  Adhesion Studies – Reported in literature [1-3]
  Migration Studies – Reported in literature [4]

Handling and Storage

- The purified protein is supplied as a solution of 0.5 mg collagen in 1.0 mL of 500 mM acetic acid or 0.25 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.

Corporate Offices: 160 Oxmoor Blvd • Birmingham, AL 35209 • USA **Mailing Address:** P.O. Box 26221 • Birmingham, AL 35260 • USA
Tel: 205.945.1774 • U.S. and Canada: 800.722.2255 • **Fax:** 205.945.8768
Email: info@southernbiotech.com • **Website:** www.southernbiotech.com

References

1. Switalski LM, Butcher WG, Caufield PC, Lantz MS. Collagen mediates adhesion of Streptococcus mutans to human dentin. Infect Immun. 1993;61:4119-25. (Coating, Adhesion Studies)
2. House-Pompeo K, Boles JO, Höök M. Characterization of bacterial adhesin interactions with extracellular matrix components utilizing biosensor technology. Methods. 1994;6:134-42. (SPR, Coating, Adhesion Studies)
3. McGrady JA, Butcher WG, Beighton D, Switalski LM. Specific and charge interactions mediate collagen recognition by oral lactobacilli. J Dent Res. 1995;74:649-57. (Coating, Adhesion Studies)
4. Augustin-Voss HG, Pauli BU. Quantitative analysis of autocrine-regulated, matrix-induced, and tumor cell-stimulated endothelial cell migration using a silicon template compartmentalization technique. Exp Cell Res. 1992;198:221-7. (Coating, Migration Studies)

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Tel: 205.945.1774 • U.S. and Canada: 800.722.2255 • **Fax:** 205.945.8768
Email: info@southernbiotech.com • **Website:** www.southernbiotech.com