SouthernBiotech

Bovine Type III Collagen

Cat. No.	Format	Size
1240-02S	Purified Protein - Solution	0.5 mg

Overview

Source Placental villi
Purification Controlled and limited pepsin digestion followed by selective salt precipitation
Purity > 90% by SDS-PAGE
Alternate Name(s) COL3A1

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 III collagen is expressed in the skin and a variety of internal organs including the lungs, intestinal walls, uterus, and walls of blood vessels and is often associated with type I collagen. It also interacts with platelets in the blood clotting cascade. Type III collagen mutations are associated in a range of diseases including the vascular form of Ehlers–Danlos syndrome. Type III collagen is formed by homotrimers of α1(III) chains.

Applications

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

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. Store at 2-8°C.
- Reagent is stable for the period shown on the label if stored as directed.

Warning

Reagent contains acetic acid. Please refer to product specific SDS.

References

1. Stalling SS, Nicoll SB. Fetal ACL fibroblasts exhibit enhanced cellular properties compared with adults. Clin Orthop Relat Res. 2008;466:3130-7. (ELISA, Standard Curve)
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. Santiago JA, Pogemiller R, Ogle BM. Heterogeneous differentiation of human mesenchymal stem cells in response to extended culture in extracellular matrices. Tissue Eng Part A. 2009;15:3911-22. (Coating, Differentiation Studies)
4. Zhang ZY, Lee CS, Lider O, Weiner HL. Suppression of adjuvant arthritis in Lewis rats by oral administration of type II collagen. J Immunol. 1990;145:2489-93. (*In vivo* Assays)

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