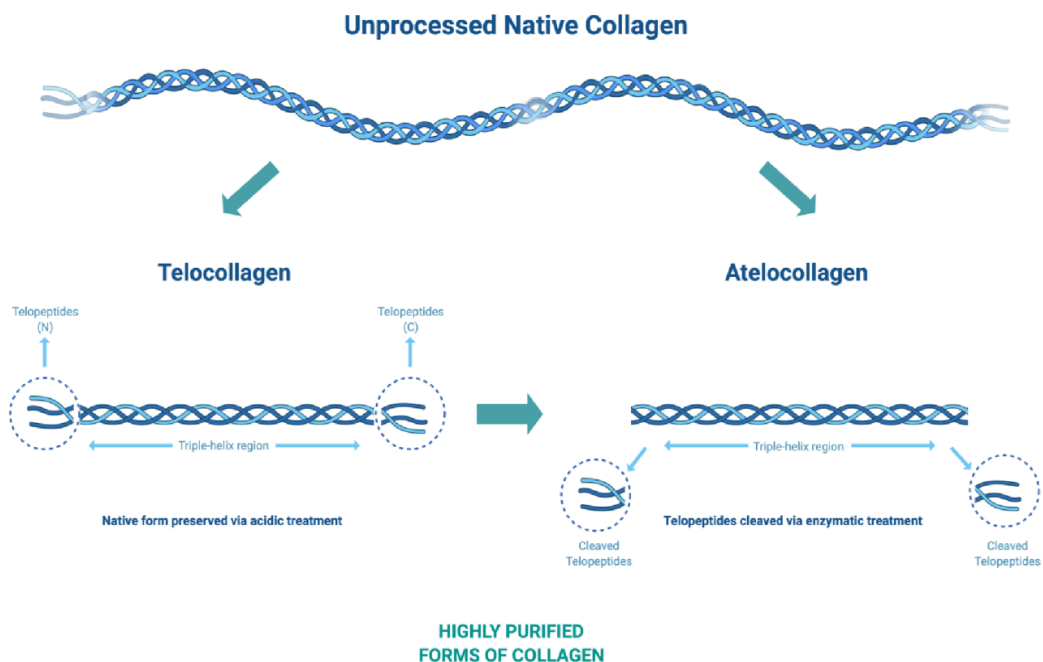


**PRO-2001 Atelocollagen, Type I, Porcine**
*Enzymatic extraction, Lyophilized*

CAS: 9007-34-5

**PRODUCT DESCRIPTION**

Lyophilized atelocollagen (PRO-2001) is characterized by rich, **highly purified Type I collagen** content that retains its superior functionality and **physical/mechanical properties**. PRO-2001 is extracted from porcine tendon tissue sourced from **strictly controlled herds**, complying with all EU and national regulations. The proprietary pepsin enzyme-based extraction method used removes telopeptides at the non-helical N and C termini, resulting in a triple helix configuration that exhibits **reduced immunogenicity**.



**Figure 1.** Enzyme-based extraction process removes the telopeptides resulting in atelocollagen (PRO-2001) that exhibits reduced immunogenicity.

Package size	10 or 20 mg in vials
Appearance	White/Off-white lyophilizate
Source	Porcine tendon
Collagen purity	> 95% (by SDS/Western blotting)
Amino Acid Analysis	Typical/characteristic profile
Electrophoretic Pattern	Characteristic pattern, visible $\alpha$ , $\beta$ , $\gamma$ bands
Sterility/Microbiological testing	Pass (0 cfu/g)
Heavy metals analysis	< 1 ppm
Sterilization method	Produced under strict aseptic conditions
Cell Attachment Assay	Pass
Cell Toxicity Assay	Pass

## — APPEARANCE

- PRO-2001 is provided as atelocollagen lyophilizate (in vials of 10 or 20 mg), allowing for an extended shelf life, in a user-friendly packaging.

## — STORAGE REQUIREMENTS

- **Long term:** storage of lyophilized product at -20°C is recommended, with a storage life of 24 months from the date of manufacturing.
- **Short term:** storage of reconstituted product at 2-8°C is recommended, for up to 6 months from the date of reconstitution.

## — RECONSTITUTION

- PRO-2001 may be reconstituted to a concentration of 0.5 - 2.0 mg/ml when used as a coating agent and as chemoattractant.
- For the production of collagen gels, a concentration of 3.0 mg/ml may be used (slow gelation assays - cells will sink to the bottom of the gel).
- To reconstitute, add 0.1M acetic acid or 0.01M HCl to the vial and let it stand without stirring. Warming to 25°C may be necessary for lyophilized atelocollagen to dissolve completely (clear solution).

## — STERILITY

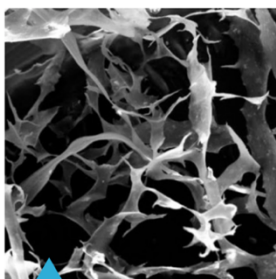
- PRO-2001 can be filter-sterilized at a concentration of 0.5 – 2.0 mg/ml (Note: protein loss has been reported during filtration).
- Alternatively, 0.1% atelocollagen solution can be sterilized in the presence of chloroform layering (10% v/v) overnight.
- To avoid contamination, always use aseptic techniques during handling.

## — APPLICATIONS

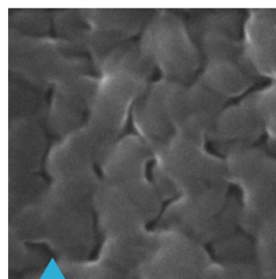
- Extracted atelocollagen is biocompatible and biodegradable and thus suitable for a wide range of research applications.
- PRO-2001 is ideal for *in vitro* cell cultures, for cell functional assays, as a chemoattractant agent and for soft 3D cell cultures (e.g., tumor assays).

## — INTENDED USE

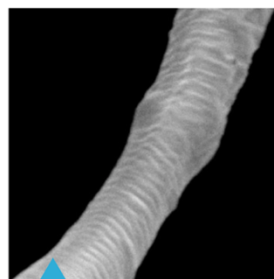
- PRO-2001 is intended for research use only and for *in vitro* or *in vivo* R&D applications. It is not intended for diagnostic, therapeutic or any other clinical uses.
- The expiration date is printed on the product label and is valid when product is used and stored as directed.
- Optimal conditions must be determined for each application/assay.



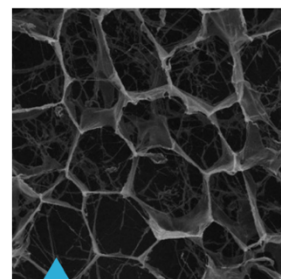
Lyophilized collagen - exhibits structural rigidity and stability



Collagen for gel formation, ideal for cell culture



Collagen fibrils retain mechanical strength and elasticity



Pore sizes ideal for tissue engineering and drug delivery