

PRO-2002 Telocollagen, Type I, Porcine
Acidic extraction, Lyophilized

CAS: 9007-34-5

PRODUCT DESCRIPTION

Lyophilized, **highly purified Type I telocollagen** (PRO-2002) is isolated via acid-based extraction that maintains the fibrillar structure of the native protein and preserves the **superior physical and mechanical properties** of the collagen found in tissues (such as the high tensile strength). PRO-2002 is extracted from porcine tendon tissue sourced from **strictly controlled herds**, complying with all EU and national regulations.

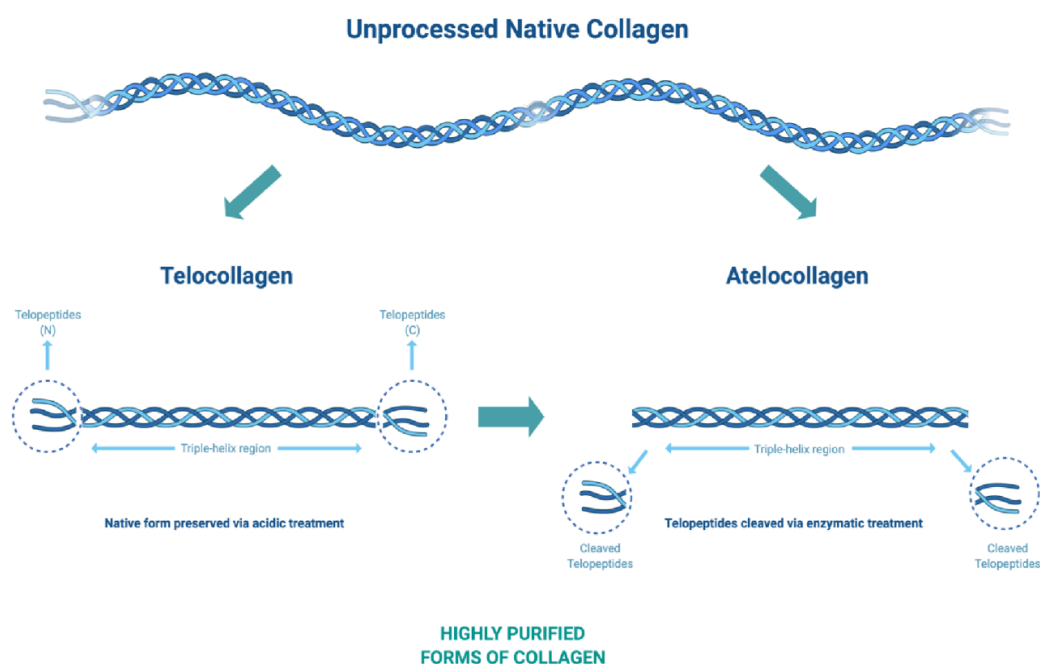


Figure 1. Acid-based extraction process results in a high quality telocollagen product (PRO-2002).

Package size	10 or 20 mg in vials
Appearance	White/Off-white powder
Source	Porcine tendon
Collagen purity	> 95% (by SDS/Western blotting)
Amino Acid Analysis	Typical/characteristic profile
Electrophoretic Pattern	Characteristic pattern
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-2002 is provided as freeze-dried telocollagen (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-2002 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 mg/ml may be used (fast gelation assays - cells will be trapped throughout gel matrix).
- Add 0.1M acetic acid or 0.01M HCl to the vial and let it stand (no stirring) until lyophilized telocollagen dissolves completely. Keep temperature low (2 - 8°C) while processing to prevent gel formation.

— STERILITY

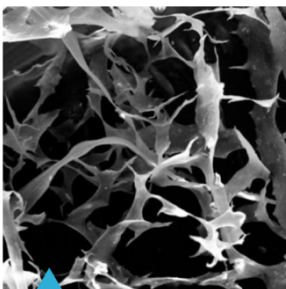
- PRO-2002 can be filter-sterilized at a concentration of 0.5-1.0 mg/ml (Note: protein loss has been reported during filtration).
- Alternatively, 0.1% telocollagen solution can be sterilized in the presence of chloroform layering (10% v/v) overnight.
- To avoid contamination, always use aseptic techniques during handling.

— APPLICATIONS

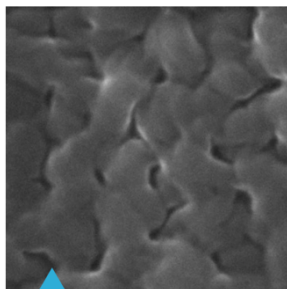
- Extracted telocollagen is biocompatible and biodegradable and thus suitable for a wide range of research applications.
- PRO-2002 is suitable as a coating for cell culture labware, for 3D cell cultures (high stiffness scaffolds) and for tissue engineering applications.

— INTENDED USE

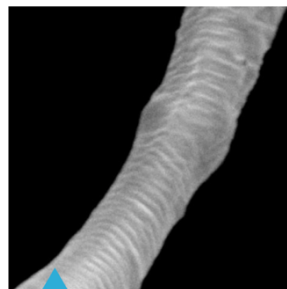
- PRO-2002 is intended for research use only and for *in vitro* or *in vivo* R&D applications. It is not intended for diagnostic, therapeutic or any other clinical uses.
- The expiration date is printed on the product label and is valid when product is used and stored as directed.
- Optimal conditions must be determined for each application/assay.



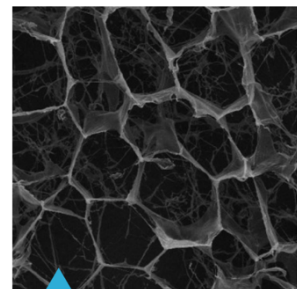
Lyophilized collagen - exhibits structural rigidity and stability



Collagen for gel formation, ideal for cell culture



Collagen fibrils retain mechanical strength and elasticity



Pore sizes ideal for tissue engineering and drug delivery