

Datasheet for 009-001-105

Human Collagen Type III

Overview

Description:	Human Collagen Type III - 009-001-105
Item No.:	009-001-105
Size:	500 µg
Applications:	SDS-PAGE, WB
Origin:	Human

Product Details

Background:	In muscle tissue, collagen serves as a major component of the endomysium. Collagen constitutes one to two percent of muscle tissue, and accounts for 6% of the weight of strong, tendinous muscles. A collagen may be defined as a protein containing sizable domain(s) of triple-helical conformation. Collagen type III, a fibrous scleroprotein found in bone, cartilage, tendon, bone marrow stroma and other connective tissue, yields gelatin on boiling. Collagen Type III scleroprotein is a simple protein found in horny and cartilaginous tissues and in the lens of the eye.
Synonyms:	Type III collagen, collagen 3, human collagen, Alpha 1 type III collagen, Alpha1 (III) collagen, COL3A1_HUMAN, Collagen Type III Alpha 1 Chain, Ehlers-Danlos Syndrome Type IV Autosomal Dominant, Fetal Collagen, Human placenta Collagen Type III Protein, Human Type III Collagen Protein, scleroprotein collagen
Species of Origin:	Human
Type:	Native Protein

Target Details

Gene Name:	COL3A1
Purity/Specificity:	Human Collagen Type III has been prepared from human placenta and is chromatographically and immunologically pure. This product is free from other collagens, human serum proteins and non-collagen extracellular matrix proteins. This product reacts with Anti-Collagen Type III. Reaction with Rockland's Anti-Collagen I, II, IV, V or VI is negligible.
Relevant Links:	009-001-105 SDS

- [UniProtKB - P02461](#)
- [NCBI - NP_000081.1](#)
- [GeneID - 1281](#)

Application Details

Tested Applications:	SDS-PAGE, WB
Application Note:	Human Collagen Type III purified protein standard has been tested in SDS-Page and western blot and is used as a control or standard in indirect trapping ELISA for quantitation of antigen using a standard curve, for immunoprecipitation, and for other immunological assays as optimized by the user. Specific conditions should be optimized by user. Collagen Type III is recognized by type specific anti-collagen antibodies that recognize a native three-dimensional structure.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000
IHC:	1:100-1:500
IP:	1:100-1:500
WB:	1:1000

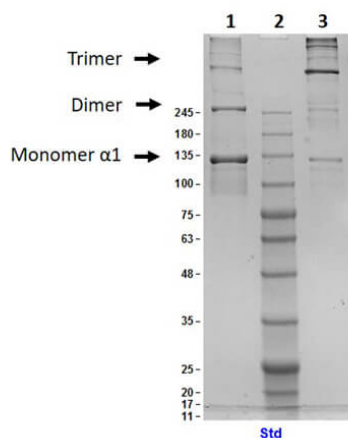
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/ml by nanodrop at 205 nm
Buffer:	0.5 M Acetic Acid
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

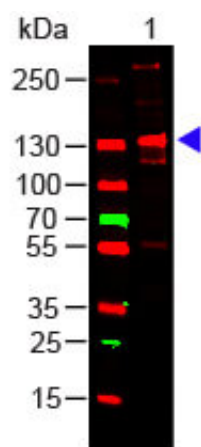
Shipping Condition:	Wet Ice
Storage Condition:	Store vial at 4° C prior to opening. This product is stable at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is six (6) months from date of receipt.

Images



SDS-PAGE

SDS-PAGE Results of Human Collagen Type III. Lane 1: Human Collagen Type III Reduced [1.0µg]. Lane 2: Opal Prestained Molecular Weight Marker (p/n MB-210-0500). Lane 3: Human Collagen Type III Non-Reduced [1.0µg]. 4-20% Gel Coomassie Stained. Observed: α1 bands.



Western Blot

Western Blot of COLLAGEN III. Lane 1: Human Collagen III. Load: 100 ng per lane. Primary antibody: Collagen III Antibody (p/n 600-401-105) at 1:1000 o/n at 4°C. Secondary antibody: DyLight™ 649 Goat anti-rabbit (p/n 611-143-002) at 1:20,000 for 30 min at RT. Block: MB-070 for 30 min at RT. Predicted/Observed size: 138 kDa, 138 kDa.

References

- Molè MA et al. Modeling human embryo implantation in vitro. *Cell*. (2026)
- Braack KJ et al. Pirfenidone Reduces Intracochlear Fibrosis Caused by Cochlear Implantation in a Guinea Pig Model. *Int J Mol Sci*. (2026)

Disclaimer

No test method can provide total assurance that the hepatitis B virus, hepatitis C virus, human immunodeficiency virus, or any other infectious agents are absent. Thus, all blood products, including purified proteins derived from human blood sources, should be handled at Biosafety Level 2 as recommended by the CDC\NIH manual entitled Biosafety in Microbiological and Biomedical Laboratories for potentially infectious human serum, blood specimens or proteins derived from same. Source material for the human blood product supplied to your facility has been tested for the detection of HIV antibody, Hepatitis B surface antigen, antibody to Hepatitis C, HIV 1 antigen(s), antibody to HTLV - I/II, and syphilis by FDA guidelines. All units were found to be non-reactive/negative for these tests. All human blood source material is collected in FDA licensed centers and is tested with FDA approved test kits.

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.