

Datasheet for 009-001-104

Human Collagen Type II

Overview

Description:	Human Collagen Type II (ADULT KNEE CARTILAGE) - 009-001-104
Item No.:	009-001-104
Size:	100 µg
Applications:	SDS-PAGE, WB
Origin:	Human

Product Details

Background:	Human Collagen Type II is one of a family of proteins found particularly in the flesh and connective tissues of mammals (approximately one-third of the body's total protein). Over two dozen types of collagen have been described; Type II is found predominantly in hyaline cartilage (50% of the protein in hyaline is collagen type II) and is also found in the vitreous humor of the eye.
Synonyms:	Type II collagen, collagen II, human collagen, hyaline collagen
Species of Origin:	Human
Type:	Native Protein

Target Details

Gene Name:	COL2A1
Purity/Specificity:	Human Collagen Type II has been prepared from adult human knee cartilage and is chromatographically and immunologically pure. Human Collagen Type II is free from other collagens, human serum proteins and non-collagen extracellular matrix proteins. Human Collagen Type II reacts with anti-Collagen Type II. Reaction with Rockland's anti-Collagen I, III, IV, V or VI is negligible.
Relevant Links:	• GenelD - 1280 • NCBI - CAA34683.1 • UniProtKB - P02458 • SDS

Application Details

Tested Applications:	SDS-PAGE
Suggested Applications:	WB (Based on references)
Application Note:	Human Collagen Type II has been tested in SDS-Page and can be utilized as a control or standard reagent in Western Blotting and ELISA experiments.
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
WB:	1:1000

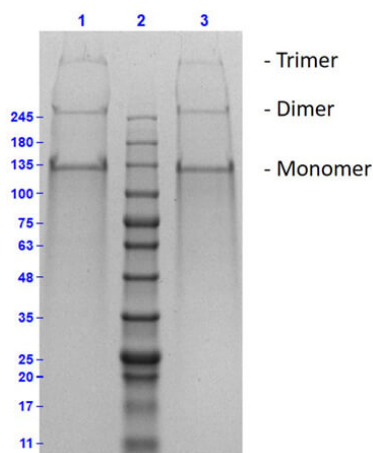
Formulation

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

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 II. Lane 1: Human Collagen Type II Reduced [7µg]. Lane 2: Opal Prestained Molecular weight marker (p/n MB-210-0500). Lane 3: Human Collagen Type II Non-Reduced [7µg]. 7.5% gel, coomassie stained.

References

- Wang C et al. Type III collagen is a key regulator of the collagen fibrillar structure and biomechanics of articular cartilage and meniscus. *Matrix Biol.* (2020)

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.

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