

**Datasheet for 600-406-104****Collagen Type II Antibody Biotin Conjugated****Overview**

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|----------------------|-------------------------------------------------------------------------|
| <b>Description:</b>  | Anti-Collagen Type II (RABBIT) Antibody Biotin Conjugated - 600-406-104 |
| <b>Item No.:</b>     | 600-406-104                                                             |
| <b>Size:</b>         | 100 µg                                                                  |
| <b>Reactivity:</b>   | Human, Bovine                                                           |
| <b>Host Species:</b> | Rabbit                                                                  |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
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| <b>Background:</b>   | Anti-Collagen Type II antibody detects Type-II collagen which is the basis for articular cartilage and hyaline cartilage. It makes up 50% of all protein in cartilage and 85-90% of collagen of articular cartilage. Type II collagen does form fibrils which allow cartilage to entrap the proteoglycan aggregate as well as provide tensile strength to the tissue. Anti-Collagen Type II antibody is ideal for investigators involved in Immunology, Neuroscience and Signal Transduction research. |
| <b>Synonyms:</b>     | rabbit anti-Collagen Type II antibody biotin conjugation, biotin conjugated rabbit anti-Collagen Type II antibody, Collagen alpha-1 (II) chain, Alpha-1 type II collagen, Cartilage collagen antibody, Chondrocalcin antibody, COL2A1 antibody                                                                                                                                                                                                                                                         |
| <b>Host Species:</b> | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Conjugate:</b>    | Biotin                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Format:</b>       | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

**Target Details**

|                        |                                                                                                                                                         |
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| <b>Gene Name:</b>      | COL2A1                                                                                                                                                  |
| <b>Reactivity:</b>     | Human, Bovine                                                                                                                                           |
| <b>Immunogen Type:</b> | Native Protein                                                                                                                                          |
| <b>Immunogen:</b>      | Anti-Collagen Type II antibody was produced by repeated immunizations with Collagen Type II from adult human knee cartilage and bovine nasal cartilage. |

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| <b>Purity/Specificity:</b> | This product has been prepared by immunoaffinity chromatography using immobilized antigens followed by extensive cross-adsorption against other collagens. Some class specific anti-collagens may be specific for three-dimensional epitopes which may result in diminished reactivity with denatured collagen or formalin-fixed, paraffin embedded tissues. This antibody reacts with most mammalian Type II collagens and has expected cross-reactivity with Type IV and VI and negligible cross reactivity to Type I, III and V collagens. Non-specific cross reaction of anti-collagen antibodies with other human serum proteins or non-collagen extracellular matrix proteins has not been tested. |
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| <b>Relevant Links:</b> | <ul style="list-style-type: none"><li>• <a href="#">NCBI - NP_001835.3</a></li><li>• <a href="#">UniProtKB - P02458</a></li><li>• <a href="#">GeneID - 1280</a></li></ul> |
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## Application Details

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| <b>Application Note:</b> | Anti-Collagen Type II antibody is suitable for western blotting, IP, IHC and for ELISA. Researchers should determine optimal titers for applications that are not stated below. |
| <b>Assay Dilutions:</b>  | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                 |
| <b>ELISA:</b>            | 1:10,000 - 1:50,000                                                                                                                                                             |
| <b>IHC:</b>              | 1:200 - 1:1,000                                                                                                                                                                 |
| <b>IP:</b>               | 1:100                                                                                                                                                                           |
| <b>WB:</b>               | 1:5,000 - 1:10,000                                                                                                                                                              |

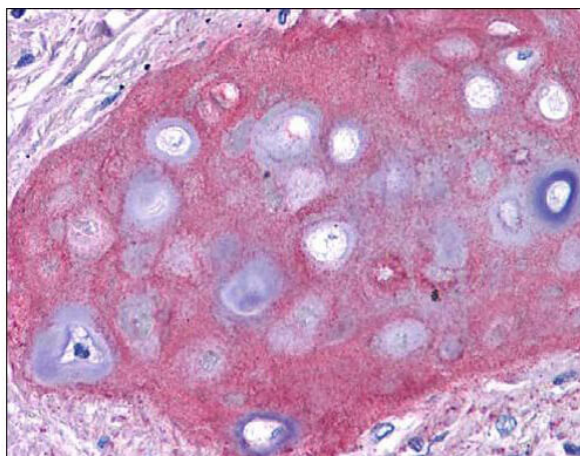
## Formulation

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|-------------------------------|------------------------------------------------------------------------|
| <b>Physical State:</b>        | Lyophilized                                                            |
| <b>Concentration:</b>         | 1.0 mg/mL by UV absorbance at 280 nm                                   |
| <b>Buffer:</b>                | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2             |
| <b>Preservative:</b>          | 0.01% (w/v) Sodium Azide                                               |
| <b>Stabilizer:</b>            | 10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free |
| <b>Reconstitution Volume:</b> | 100 µL                                                                 |
| <b>Reconstitution Buffer:</b> | Restore with deionized water (or equivalent)                           |

## Shipping & Handling

|                            |                                                                                                                                                                                                                                                                                                                                                                                                         |
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| <b>Shipping Condition:</b> | Ambient                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Storage Condition:</b>  | Store vial at 4° C prior to restoration. Restore with 0.1 mL of deionized water (or equivalent). For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use. |
| <b>Expiration:</b>         | Expiration date is one (1) year from date of receipt.                                                                                                                                                                                                                                                                                                                                                   |

## Images



### Immunohistochemistry

Immunohistochemistry of Rabbit Anti-Collagen II Antibody (600-401-104). Tissue: human bronchiolar cartilage (shown). Though not shown, faint to moderate staining of tonsillar squamous epithelium, prostatic stroma, breast, colon, placenta, and dermal connective tissues was also observed. All other tissues, including brain, breast epithelium, colon epithelium, heart, intestine, kidney, liver, lung, skeletal muscle, pancreas, spleen, testis, thymus, thyroid, and uterus were negative for staining. Fixation: formalin fixed paraffin embedded. Antigen retrieval: 0.01 M sodium citrate buffer, pH 6.0 at 99-100°C - 20 minutes. Primary antibody: collagen II antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: Collagen II is extracellular. Staining: Collagen II as precipitated red signal with hematoxylin purple nuclear counterstain.

## Disclaimer

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.