

## Rabbit anti-Human COL4A3 Polyclonal Antibody | anti-COL4A3 antibody

Anti-COL4A3 Antibody Picoband

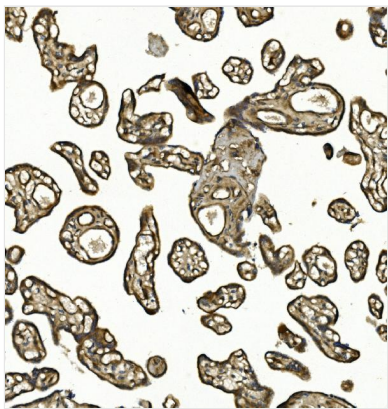
|                              |                       |                            |                                                    |
|------------------------------|-----------------------|----------------------------|----------------------------------------------------|
| CATALOG #<br><b>AAA19432</b> | HOST<br><b>Rabbit</b> | REACTIVITY<br><b>Human</b> | APPLICATIONS<br><b>Immunohistochemistry, ELISA</b> |
|------------------------------|-----------------------|----------------------------|----------------------------------------------------|

### PRODUCT SYNONYMS

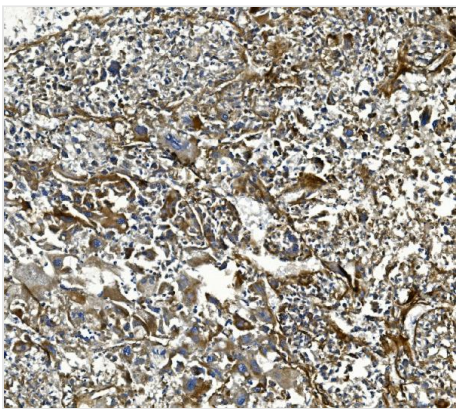
COL4A3; Polyclonal Antibody; Anti-COL4A3 Antibody Picoband; anti-COL4A3 antibody

### PRODUCT SPECIFICATIONS

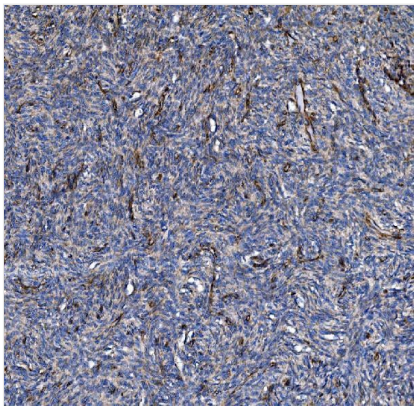
|                                                  |                                                                                                                                                                                                                              |
|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                             | Rabbit                                                                                                                                                                                                                       |
| Reactivity                                       | Human                                                                                                                                                                                                                        |
| Clonality                                        | Polyclonal                                                                                                                                                                                                                   |
| Isotype                                          | Rabbit IgG                                                                                                                                                                                                                   |
| Specificity                                      | Natural and recombinant Human CHI3L1                                                                                                                                                                                         |
| Purity/Purification                              | Immunogen affinity purified.                                                                                                                                                                                                 |
| Form/Format                                      | Lyophilized<br>Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> .                                                                                                                     |
| Concentration                                    | Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml. (varies by lot)                                                                                                                                    |
| Applicable Applications for anti-COL4A3 antibody | IHC (Immunohistochemistry), ELISA                                                                                                                                                                                            |
| Application Notes                                | IHC-P: 2-5 ug/ml, Human<br>Direct ELISA: 0.1-0.5 ug/ml, Human<br>Tested Species: In-house tested species with positive results.<br>HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit for IHC(P).                         |
| Assay Type                                       | Sandwich                                                                                                                                                                                                                     |
| Samples                                          | Cell culture supernatants, serum, plasma (heparin, EDTA) and urine                                                                                                                                                           |
| Detection Range                                  | 62.5 pg/ml - 4,000 pg/ml                                                                                                                                                                                                     |
| Sensitivity                                      | <10 pg/ml                                                                                                                                                                                                                    |
| Intra-assay Precision                            | Intra-Assay Precision (Precision within an assay): Three samples of known concentration were tested on one plate to assess intra-assay precision.                                                                            |
| Inter-assay Precision                            | Inter-Assay Precision (Precision across assays): Three samples of known concentration were tested in separate assays to assess inter-assay precision.                                                                        |
| Preparation and Storage                          | Store at -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months. Avoid repeated freezing and thawing. |



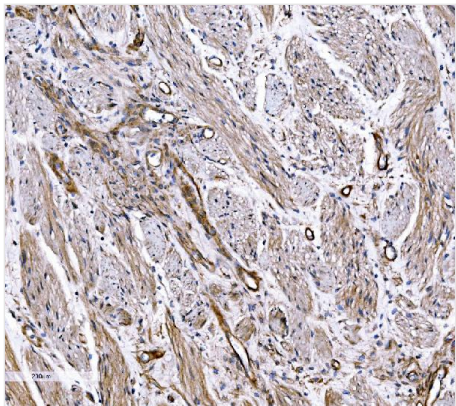
**IHC (Immunohistochemistry)**  
Figure 6. IHC analysis of COL4A3 using anti-COL4A3 antibody (AAA19432).COL4A3 was detected in a paraffin-embedded section of human placenta tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-COL4A3 Antibody (AAA19432) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



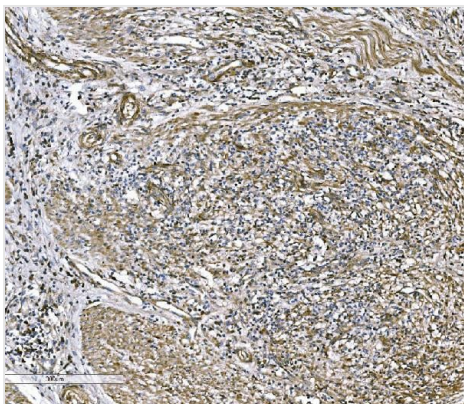
**IHC (Immunohistochemistry)**  
Figure 5. IHC analysis of COL4A3 using anti-COL4A3 antibody (AAA19432).COL4A3 was detected in a paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-COL4A3 Antibody (AAA19432) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



**IHC (Immunohistochemistry)**  
Figure 4. IHC analysis of COL4A3 using anti-COL4A3 antibody (AAA19432).COL4A3 was detected in a paraffin-embedded section of human skin cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-COL4A3 Antibody (AAA19432) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

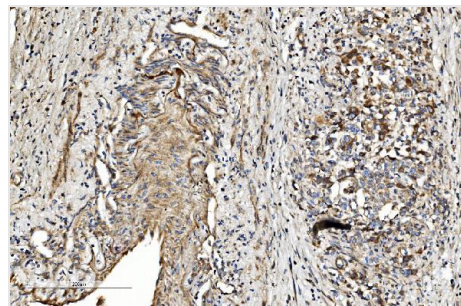


**IHC (Immunohistochemistry)**  
Figure 3. IHC analysis of COL4A3 using anti-COL4A3 antibody (AAA19432).COL4A3 was detected in a paraffin-embedded section of human renal carcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-COL4A3 Antibody (AAA19432) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



#### IHC (Immunohistochemistry)

Figure 2. IHC analysis of COL4A3 using anti-COL4A3 antibody (AAA19432). COL4A3 was detected in a paraffin-embedded section of human rectal cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-COL4A3 Antibody (AAA19432) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



#### IHC (Immunohistochemistry)

Figure 1. IHC analysis of COL4A3 using anti-COL4A3 antibody (AAA19432). COL4A3 was detected in a paraffin-embedded section of human gastric cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-COL4A3 Antibody (AAA19432) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

## ADDITIONAL INFORMATION

### Related Product Information for anti-COL4A3 antibody

Background: Chitinase-3-like protein 1, also called CHI3L1 or YKL-40 is a secreted glycoprotein that is approximately 40kDa in size that in humans is encoded by the CHI3L1 gene. This gene is mapped to 1q32.1. Chitinases catalyze the hydrolysis of chitin, which is an abundant glycopolymer found in insect exoskeletons and fungal cell walls. The glycoside hydrolase 18 family of chitinases includes eight human family members. This gene encodes a glycoprotein member of the glycosyl hydrolase 18 family. The protein lacks chitinase activity and is secreted by activated macrophages, chondrocytes, neutrophils and synovial cells. The protein is thought to play a role in the process of inflammation and tissue remodeling.

Principle of the Assay: The Quick Picokine™ Human CHI3L1 Pre-Coated ELISA (Enzyme-Linked Immunosorbent Assay) kit is a solid phase immunoassay specially designed to measure Human CHI3L1 in cell culture supernatants, serum, plasma (heparin, EDTA) and urine. It uses our proprietary Quick ELISA technology. Quick ELISA technology employs capture antibodies conjugated to an affinity tag that is recognized by the polyclonal antibody used to coat our Quick ELISA plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. The kit contains recombinant Human CHI3L1 with immunogen: Expression system for standard: NS0; Immunogen sequence: Y22-T383. To measure Human CHI3L1, add standards and samples to the wells, then add antibody cocktail. Wash the wells with PBS or TBS buffer, and add TMB. TMB is an HRP substrate and will be catalyzed to produce a blue color product, which changes into yellow after adding the acidic stop solution. The absorbance of the yellow product is linearly proportional to Human CHI3L1 in the sample. Read the absorbance of the yellow product in each well using a plate reader, and benchmark the sample wells' readings against the standard curve to determine the concentration of Human CHI3L1 in the sample.

### Product Categories/Family for anti-COL4A3 antibody

Primary Antibodies, Rabbit Polyclonal Antibodies

## NCBI AND UNIPROT INFORMATION

|                           |                                                                                |
|---------------------------|--------------------------------------------------------------------------------|
| NCBI GI #                 | 89142730                                                                       |
| NCBI GeneID               | 1285                                                                           |
| NCBI Accession #          | NP_000082.2                                                                    |
| NCBI GenBank Nucleotide # | NM_000091.4                                                                    |
| UniProt Accession #       | Q01955; Q53QQ1; Q53R14; Q53RW8; Q9BQT2; Q9NYC4; Q9UDJ9; Q9UDK9; Q9UDL0; Q9UDL1 |
| Molecular Weight          | 161,813 Da                                                                     |

|                                  |                                                                                                     |
|----------------------------------|-----------------------------------------------------------------------------------------------------|
| NCBI Official Full Name          | collagen alpha-3(IV) chain                                                                          |
| NCBI Official Synonym Full Names | collagen, type IV, alpha 3 (Goodpasture antigen)                                                    |
| NCBI Official Symbol             | COL4A3                                                                                              |
| NCBI Protein Information         | collagen alpha-3(IV) chain; collagen alpha-3(IV) chain; tumstatin; collagen IV, alpha-3 polypeptide |
| UniProt Protein Name             | Collagen alpha-3(IV) chain                                                                          |
| UniProt Gene Name                | <b>COL4A3</b>                                                                                       |
| UniProt Entry Name               | CO4A3_HUMAN                                                                                         |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/col4a3-antibody-immunohistochemistry-elisa/19432>