

Datasheet for ABIN5692826

**anti-COL4A1 antibody (AA 1445-1669)****2** Images**8** Publications[Go to Product page](#)

## Overview

Quantity:	100 µg
Target:	COL4A1
Binding Specificity:	AA 1445-1669
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This COL4A1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

## Product Details

Brand:	Picoband™
Immunogen:	E.coli-derived human Collagen IV recombinant protein (Position: G1445-T1669). Human Collagen IV shares 97% amino acid (aa) sequence identity with mouse Collagen IV.
Clone:	3G3
Isotype:	IgG1
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	Mouse IgG monoclonal antibody for Collagen IV detection. Tested with WB, IHC-P in Human.

## Target Details

Target:	COL4A1
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## Target Details

Alternative Name:	COL4A1 ( <a href="#">COL4A1 Products</a> )
Background:	<p>Synonyms: Collagen alpha-1(IV) chain, Arresten, COL4A1</p> <p>Tissue Specificity: Highly expressed in placenta.</p> <p>Background: COL4A1, also known as ICH or Collagen alpha-1(IV), is a protein that in humans is encoded by the COL4A1 gene. It is mapped to 13q34. This gene encodes the major type IV alpha collagen chain of basement membranes. Like the other members of the type IV collagen gene family, this gene is organized in a head-to-head conformation with another type IV collagen gene so that each gene pair shares a common promoter. COL4A1 binds to alpha-1/beta-1 integrin and inhibits migration, proliferation, and tube formation by endothelial cells. It is also a potential therapeutic candidate for targeting tumor angiogenesis.</p>
UniProt:	<a href="#">P02462</a>
Pathways:	<a href="#">Skeletal Muscle Fiber Development</a> , <a href="#">Growth Factor Binding</a>

## Application Details

Application Notes:	<p>Recommended Detection Systems: Enhanced Chemiluminescent Kit with anti-Rabbit IgG (ABIN921124) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).</p> <p>Application Details: Western blot, 0.1-0.5 µg/mL</p> <p>Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/mL</p>
Restrictions:	For Research Use only

## Handling

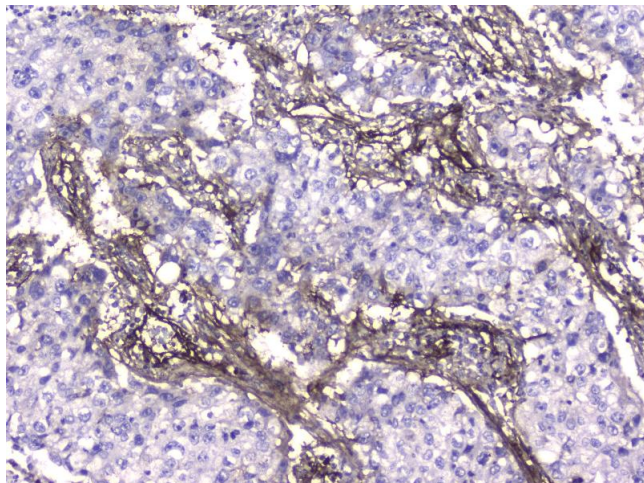
Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C, -20 °C
Storage Comment:	<p>At -20°C for one year. After reconstitution, at 4°C for one month.</p> <p>It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing</p>

and thawing.

## Publications

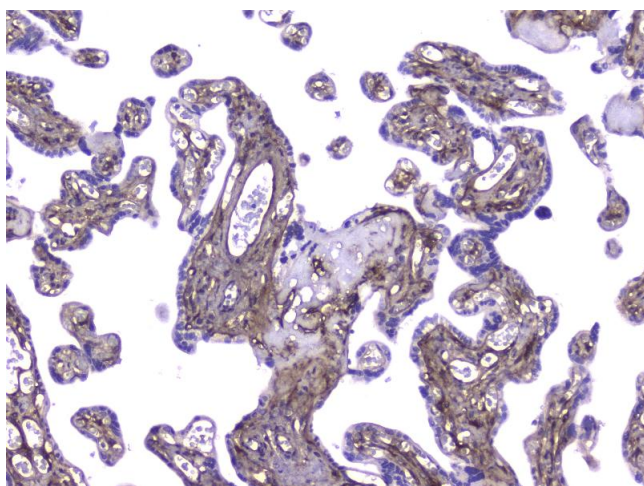
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- Product cited in:
- Li, Xiao, Li, Li, Zeng, Liu, Liang, Li, Chu, Yang: "Hydrogen sulfide reduced renal tissue fibrosis by regulating autophagy in diabetic rats." in: **Molecular medicine reports**, Vol. 16, Issue 2, pp. 1715-1722, (2018) ([PubMed](#)).
- Zhang, Ju, Nie, Song, Xu, Gao: "Adenovirus-mediated knockdown of activin A receptor type 2A attenuates immune-induced hepatic fibrosis in mice and inhibits interleukin-17-induced activation of primary hepatic stellate cells." in: **International journal of molecular medicine**, Vol. 42, Issue 1, pp. 279-289, (2018) ([PubMed](#)).
- Zhang, Jin, Tian, Wu: "hsa-miR-29c-3p regulates biological function of colorectal cancer by targeting SPARC." in: **Oncotarget**, Vol. 8, Issue 61, pp. 104508-104524, (2017) ([PubMed](#)).
- Fan, Jiang, Li, Fang, Xu, Zheng: "MMP-1/2 and TIMP-1/2 expression levels, and the levels of collagenous and elastic fibers correlate with disease progression in a hamster model of tongue cancer." in: **Oncology letters**, Vol. 11, Issue 1, pp. 63-68, (2016) ([PubMed](#)).
- Zhang, Teng, Liu, Zhang, Liu: "Gene expression profile analyze the molecular mechanism of CXCR7 regulating papillary thyroid carcinoma growth and metastasis." in: **Journal of experimental & clinical cancer research : CR**, Vol. 34, pp. 16, (2015) ([PubMed](#)).
- There are more publications referencing this product on: [Product page](#)



#### Immunohistochemistry

**Image 1.** IHC analysis of Collagen IV using anti-Collagen IV antibody . Collagen IV was detected in paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2µg/ml mouse anti-Collagen IV Antibody overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1021) with DAB as the chromogen.



#### Immunohistochemistry

**Image 2.** IHC analysis of Collagen IV using anti-Collagen IV antibody . Collagen IV was detected in paraffin-embedded section of human placenta tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2µg/ml mouse anti-Collagen IV Antibody overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1021) with DAB as the chromogen.