BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

Anti-Collagen IV COL4A1 Antibody Picoband® (monoclonal, 3G3)

Catalog Number: M01411

About COL4A1

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.

Submit a product review to Biocompare.com





Submit a review of this product to Biocompare.com to receive a $20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.

Overview

Product Name	Anti-Collagen IV COL4A1 Antibody Picoband® (monoclonal, 3G3)
Reactive Species	Human
Description	Boster Bio Anti-Collagen IV COL4A1 Antibody Picoband® (monoclonal, 3G3) catalog # M01411. Tested in IF, IHC, WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	IF, IHC, WB
Clonality	Monoclonal 3G3
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Storage Instructions	Store at -20˚C for one year from date of receipt. After reconstitution, at 4˚C for one month. It can also be aliquotted and stored frozen at -20˚C for six months. Avoid repeated freeze-thaw cycles.
Host	Mouse
Uniprot ID	P02462

Technical Details

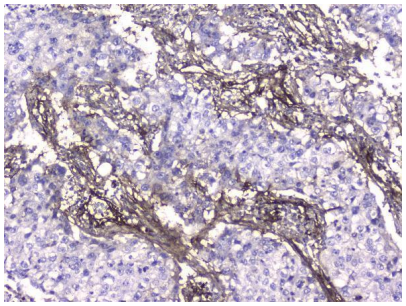
Immunogen	E.coli-derived human Collagen IV recombinant protein (Position: G1445-T1669). Human Collagen IV shares 97% amino acid (aa) sequence identity with mouse Collagen IV.

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

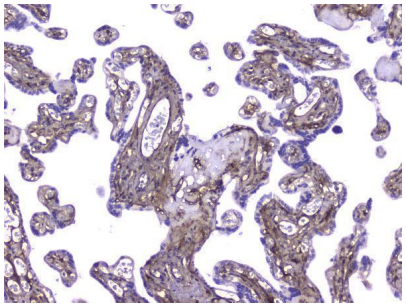
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Mouse IgG (EK1001) for Western blot, and HRP Conjugated anti-Mouse IgG Super Vision Assay Kit (SV0001-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Mouse IgG1
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.1-0.5ug/ml Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml Immunofluorescence, 2ug/ml

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

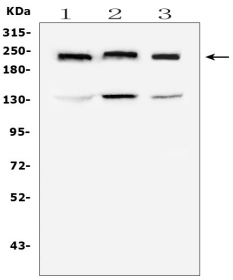
Anti-Collagen IV COL4A1 Antibody Picoband® (monoclonal, 3G3) (M01411) Images



IHC analysis of Collagen IV using anti-Collagen IV antibody (M01411). 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 2ug/ml mouse anti-Collagen IV Antibody (M01411) 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 Strepavidin-Biotin-Complex (SABC)(Catalog # SA1021) with DAB as the chromogen.



IHC analysis of Collagen IV using anti-Collagen IV antibody (M01411). 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 2ug/ml mouse anti-Collagen IV Antibody (M01411) 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 Strepavidin-Biotin-Complex (SABC)(Catalog # SA1021) with DAB as the chromogen.



Western blot analysis of Collagen IV using anti-Collagen IV antibody (M01411). Electrophoresis was performed on a 8% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: human HEK293T whole cell lysate, Lane 2: human Hela whole cell lysate, Lane 3: human A549 whole cell lysate. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-Collagen IV antigen affinity purified monoclonal antibody (Catalog # M01411) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001) with Tanon 5200 system. A specific band was detected for Collagen IV at approximately 220KD. The expected band size for Collagen IV is at 161KD.

6 Publications Citing This Product

1. PubMed ID: 25887589, Zhang H, Teng X, Liu Z, Zhang L, Liu Z. J Exp Clin Cancer Res. 2015 Feb 12;34:16. Doi: 10.1186/S13046-015-0132-Y. Gene Expression Profile Analyze The Molecular Mechanism Of Cxcr7 Regulating Papillary Thyroid Carcinoma Growth And Metastasis.

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
888-466-3604 | support@bosterbio.com | www.bosterbio.com

2. PubMed ID: 24312656, Wen D, Huang X, Zhang M, Zhang L, Chen J, Gu Y, Hao Cm. Plos One. 2013 Dec 3;8(12):E82336. Doi: 10.1371/Journal.Pone.0082336. Ecollection 2013. Resveratrol Attenuates Diabetic Nephropathy Via Modulating Angiogenesis.

3. PubMed ID: 24069460, Zhu B, Xu T, Yuan J, Guo X, Liu D. Plos One. 2013 Sep 19;8(9):E76282. Doi: 10.1371/Journal.Pone.0076282. Ecollection 2013. Transcriptome Sequencing Reveals Differences Between Primary And Secondary Hair Follicle-Derived Dermal Papilla Cells Of The...

Visit bosterbio.com/anti-collagen-iv-picoband-trade-antibody-m01411-boster.html to see all 6 publications.

Anti-Collagen IV COL4A1 Antibody (monoclonal, 3G3)

For Research Use Only. Not for use in diagnostic procedures.