

Datasheet for ABIN3042755
anti-COL4A1 antibody (AA 1445-1669)[Go to Product page](#)

2 Images

32 Publications

Overview

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

Product Details

Purpose:	Rabbit IgG polyclonal antibody for Collagen alpha-1(IV) chain(COL4A1) detection. Tested with WB, IHC-P in Human.
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.
Isotype:	IgG
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	<p>Rabbit IgG polyclonal antibody for Collagen alpha-1(IV) chain(COL4A1) detection. Tested with WB, IHC-P in Human.</p> <p>Gene Name: collagen, type IV, alpha 1</p> <p>Protein Name: Collagen alpha-1(IV) chain</p>
Purification:	Immunogen affinity purified.

Target Details

Target:	COL4A1
Alternative Name:	COL4A1 (COL4A1 Products)
Background:	<p>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> <p>Synonyms: Arresten antibody Canstatin antibody CO4A1_HUMAN antibody COL4A1 antibody COL4A1 NC1 domain antibody COL4A2 antibody COL4A3 antibody COL4A4 antibody COL4A5 antibody Collagen Alpha 1(IV) Chain antibody Collagen Alpha 2(IV) Chain antibody collagen alpha-1(IV) chain antibody Collagen IV Alpha 1 Polypeptide antibody Collagen IV Alpha 2 Polypeptide antibody Collagen Of Basement Membrane Alpha 1 Chain antibody Collagen Of Basement Membrane Alpha 2 Chain antibody Collagen Type IV Alpha 1 antibody Collagen Type IV Alpha 2 antibody Collagen Type IV Alpha 3 antibody Collagen Type IV Alpha 4 antibody Collagen Type IV Alpha 5 antibody DKFZp686I14213 antibody FLJ22259 antibody</p>
Gene ID:	1282
UniProt:	P02462
Pathways:	Skeletal Muscle Fiber Development , Growth Factor Binding

Application Details

Application Notes:	<p>WB: Concentration: 0.1-0.5 µg/mL, Tested Species: Human, The detection limit for Collagen IV is approximately 0.25 ng/lane under reducing conditions.</p> <p>IHC-P: Concentration: 0.5-1 µg/mL, Tested Species: Human, Epitope Retrieval by Heat: Boiling the paraffin sections in 10 mM citrate buffer, pH 6.0, for 20 mins is required for the staining of formalin/paraffin sections.</p> <p>Notes: Tested Species: Species with positive results. Other applications have not been tested. Optimal dilutions should be determined by end users.</p>
Comment:	Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by ABIN921231 in IHC(P).

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.

Concentration: 500 µg/mL

Buffer: Each vial contains 5 mg BSA, 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.

Handling Advice: Avoid repeated freezing and thawing.

Storage: 4 °C/-20 °C

Storage Comment: At -20°C for one year. After reconstitution, at 4°C for one month.
It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

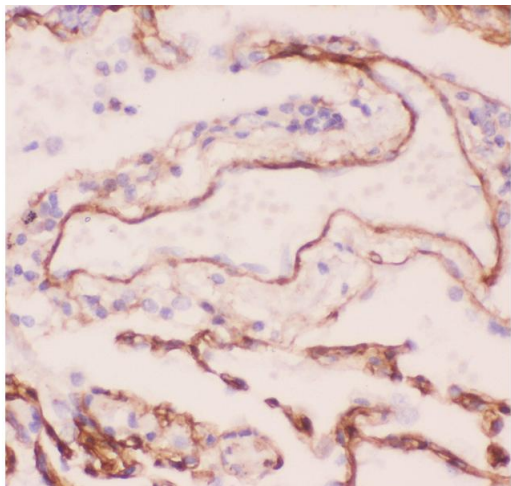
Publications

Product cited in: Zhang, Yan, Xu, Fang, Zhang, Zhang, Wu, Kong, Huang: "The recovery trajectory of adolescent social defeat stress-induced behavioral, (1)H-MRS metabolites and myelin changes in Balb/c mice." in: **Scientific reports**, Vol. 6, pp. 27906, (2018) ([PubMed](#)).

Sun, Hu, Xiong, Tu, Zhao, Chen, Song, Ye: "Enhanced expression of stem cell markers and drug resistance in sphere-forming non-small cell lung cancer cells." in: **International journal of clinical and experimental pathology**, Vol. 8, Issue 6, pp. 6287-300, (2016) ([PubMed](#)).

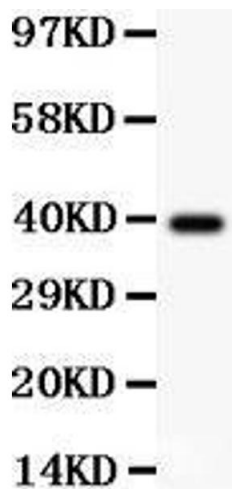
Yang, Gao, Zhang, Fang, Wu, Xu, Huang: "Changes in proinflammatory cytokines and white matter in chronically stressed rats." in: **Neuropsychiatric disease and treatment**, Vol. 11, pp. 597-607, (2015) ([PubMed](#)).

There are more publications referencing this product on: [Product page](#)



Immunohistochemistry

Image 1. Anti-Collagen IV Picoband antibody, IHC(P): Human Lung Cancer Tissue



Western Blotting

Image 2. Anti-Collagen IV Picoband antibody, All lanes: Anti Collagen IV at 0.5ug/ml WB: Recombinant Human Collagen IV Protein 0.5ng Predicted bind size: 39KD Observed bind size: 39KD