Product Datasheet

Collagen VI alpha 1 Antibody - BSA Free
NB120-6588

Unit Size: 0.1 mg

Store at 4C short term. For extended storage, add an equal volume of glycerol, aliquot and store at -20C or below. Avoid repeated freeze-thaw cycles.

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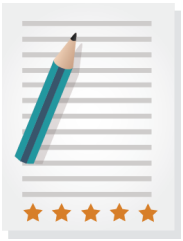
Updated 2/21/2025 v.20.1



NB120-6588

Collagen VI alpha 1 Antibody - BSA Free

Product Information

Unit Size	0.1 mg
Concentration	Please see the vial label for concentration. If unlisted please contact technical services.
Storage	Store at 4C short term. For extended storage, add an equal volume of glycerol, aliquot and store at -20C or below. Avoid repeated freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.01% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Product Description

Description	This antibody has been prepared by immunoaffinity chromatography using immobilized antigens followed by extensive cross-adsorption against other collagens, human serum proteins and non-collagen extracellular matrix proteins to remove any unwanted specificities. 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. Store vial at 4C prior to opening. This product is stable at 4C as an undiluted liquid. Dilute only prior to immediate use. For extended storage, mix with an equal volume of glycerol, aliquot contents and freeze at -20C or below. Avoid cycles of freezing and thawing.
Host	Rabbit
Gene ID	1291
Gene Symbol	COL6A1
Species	Human, Mouse, Rat, Bovine, Feline
Reactivity Notes	This antibody reacts with most mammalian Collagen VI alpha 1 and has negligible cross-reactivity with Type I, II, III, IV or V collagens. Non-specific cross-reaction of anti-collagen antibodies with other human serum proteins or non-collagen extracellular matrix proteins is negligible. Feline reactivity reported in scientific literature (PMID: 33091431).
Specificity/Sensitivity	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 Collagen VI alpha 1 and has negligible cross-reactivity with Type I, II, III, IV or V collagens. Non-specific cross-reaction of anti-collagen antibodies with other human serum proteins or non-collagen extracellular matrix proteins is negligible.
Immunogen	Collagen VI alpha 1 from human and bovine placenta (Uniprot: P12109)

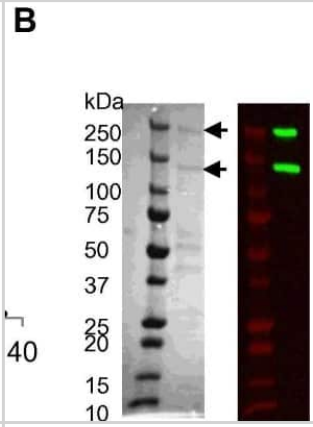
Product Application Details

Applications	Western Blot, ELISA, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin, Immunoprecipitation, PCR

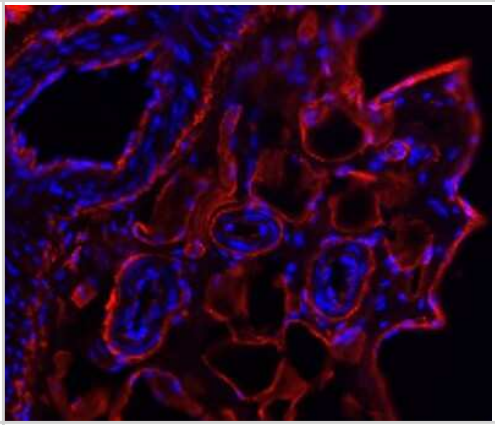
Recommended Dilutions	Western Blot 1:1000-1:10000, Flow Cytometry, ELISA 1:5000-1:50000, Immunohistochemistry 1:50-1:200, Immunocytochemistry/ Immunofluorescence 1:10-1:500, Immunoprecipitation 1:100, Immunohistochemistry-Paraffin 1:50-1:200, Immunohistochemistry-Frozen, PCR
Application Notes	This product has been tested by dot blot and IHC and is suitable for indirect trapping ELISA for quantitation of antigen in serum using a standard curve, immunoprecipitation, native (non-denaturing, non-dissociating) PAGE, immunohistochemistry, and western blotting for highly sensitive qualitative analysis.

Images

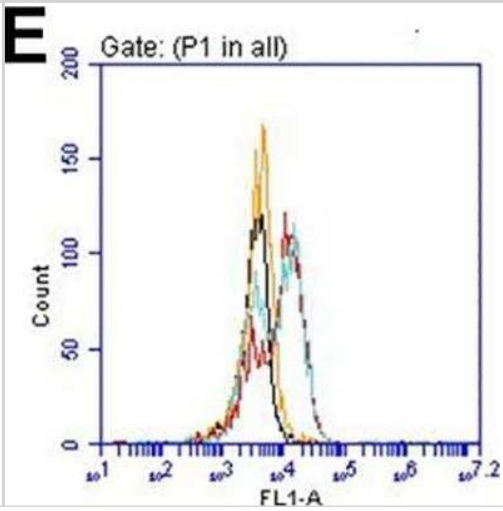
Western Blot: Collagen VI alpha 1 Antibody [NB120-6588] - Purification and imaging of collagen VI microfibrils from bovine cornea. Reducing SDS-PAGE (left hand panel) and western blot (right hand panel) of the central fraction of the void peak. Collagen VI chains were detected using a polyclonal rabbit anti collagen VI antibody. Arrows highlight bands at approximately 250 kDa, which corresponds to the alpha3 chain, and at 120 kDa which corresponds to alpha1 and alpha2 chains. Image collected and cropped by CiteAb from the following publication (www.linkinghub.elsevier.com/retrieve/pii/S1742706116306912) licensed under a CC-BY license.

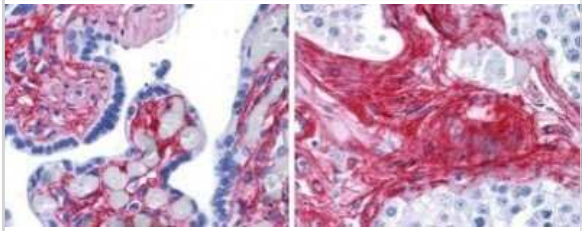
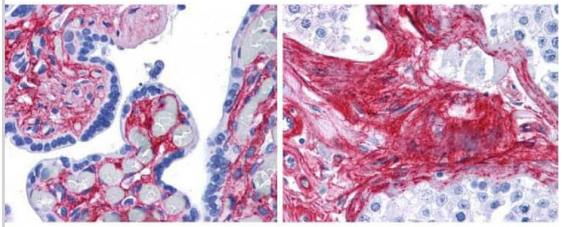


Immunohistochemistry-Frozen: Collagen VI alpha 1 Antibody [NB120-6588] - Feline blood vessels section. The image was captured with an epifluorescent microscope. Image submitted by a verified customer review



Flow Cytometry: Collagen VI alpha 1 Antibody [NB120-6588] - Effect of PTX3 on morphology, collagen production, & receptor expression. After 5 days incubation with 1 ug/ml PTX3, PBMCs were air-dried, fixed, & stained with anti-collagen-I or control antibodies. (Positive staining - red staining; nuclei - blue). Bar is 50 um. Following ICC staining, at least 100 elongated cells with oval nuclei were examined from at least 10 randomly selected fields, & the % of positive cells is expressed as mean +/- SEM (n = 3-5 donors). Supernatants from PBMC incubated in the absence (-) or presence (+) of 1 ug/ml PTX3 assessed by western blot. Adherent cells (macrophages & fibrocytes) were stained with collagen-VI (teal line SFM, red +PTX3) or control IgY (black SFM, orange +PTX3) antibodies. The data are representative of three separate experiments. Image collected & cropped by CiteAb from the following publication (www.dx.plos.org/10.1371/journal.pone.0119709) licensed under a CC-BY license.



Immunohistochemistry: Collagen VI alpha 1 Antibody [NB120-6588] - Showed strong staining in FFPE sections of human placenta (Left) with red staining of stromal and extracellular spaces, and in testis (Right) with staining of extracellular spaces between seminiferous tubules). Slides were steamed in 0.01 M sodium citrate buffer, pH 6.0 at 99-100C - 20 minutes for antigen retrieval. Image using the Biotin format of this antibody.	
anti collagen VI antibody (Lot 26009, 1:400 45 min RT) showed strong staining in FFPE sections of human placenta (Left) with red staining of stromal and extracellular spaces, and in testis (Right) with staining of extracellular spaces between seminiferous tubules). Slides were steamed in 0.01 M sodium citrate buffer, pH 6.0 at 99-100C - 20 minutes for antigen retrieval. Images provided courtesy of LifeSpan Biosciences, Seattle, WA	

Publications

Pilling D, Sahlberg K, Karhadkar T et al. The sialidase NEU3 promotes pulmonary fibrosis in mice Respir Res 2022-08-23 [PMID: 35999554]

Koloko Ngassie ML, De Vries M, Borghuis T et al. Age-associated differences in the human lung extracellular matrix American journal of physiology. Lung cellular and molecular physiology 2023-06-01 [PMID: 37039368] (Immunohistochemistry, Human)

Hernandez PA, Moreno M, Barati Z et al. Sexual Dimorphism in the Extracellular and Pericellular Matrix of Articular Cartilage Cartilage 2022-09-07 [PMID: 36069595] (Immunohistochemistry)

Zhang Y, Recouvreux MV, Jung M et al. Macropinocytosis in Cancer-Associated Fibroblasts Is Dependent on CaMKK2/ARHGEF2 Signaling and Functions to Support Tumor and Stromal Cell Fitness Cancer Discovery 2021-07-01 [PMID: 33653692]

Endzhievskaya S, Hsu CK, Yang HS et al. Loss of RhoE function in dermatofibroma promotes disorganized dermal fibroblast extracellular matrix and increased integrin activation The Journal of investigative dermatology 2023-02-10 [PMID: 36774976] (WB, ICC/IF, Human)

Endzhievskaya S Defining the role of RhoE/RND3 signalling in the control of skin homeostasis Thesis 2022-01-01

Han Y, Yamada S, Kawamoto M Et al. Immunohistochemical investigation of biomarkers for predicting adipose tissue invasion in oral squamous cell carcinoma Journal of Oral and Maxillofacial Surgery, Medicine, and Pathology 2021-11-01 (IHC-P, Human)

Oikawa K, Teixeira LBC, Keikhosravi A et al. Microstructure and resident cell-types of the feline optic nerve head resemble that of humans Exp Eye Res 2020-10-19 [PMID: 33091431] (ICC/IF, Feline)

MondragOn E, Cowdin M, Taraballi F et al. Mimicking the Organic and Inorganic Composition of Anabolic Bone Enhances Human Mesenchymal Stem Cell Osteoinduction and Scaffold Mechanical Properties Front Bioeng Biotechnol 2020-07-03 [PMID: 32719790] (PCR, ICC/IF, Human)

De Luca M, Vecchie' D, Athmanathan B et al. Genetic Deletion of Syndecan-4 Alters Body Composition, Metabolic Phenotypes, and the Function of Metabolic Tissues in Female Mice Fed A High-Fat Diet Nutrients 2019-11-18 [PMID: 31752080] (IHC-P, Mouse)

Barbariga M, Vallone F, Mosca E et al. The role of extracellular matrix in mouse and human corneal neovascularization Sci Rep 2019-10-03 [PMID: 31582785] (WB, Human, Mouse)

Lionello VM, Nicot AS, Sartori M et al. Amphiphysin 2 modulation rescues myotubular myopathy and prevents focal adhesion defects in mice Sci Transl Med 2019-03-20 [PMID: 30894500] (IF/IHC, Mouse)

More publications at http://www.novusbio.com/NB120-6588

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Products Related to NB120-6588

HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control
NBP1-97270	Collagen VI alpha 1 Native Protein

Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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