abcam

ab308455

Anti-COL1A2 antibody [EPR27415-30]

Anti-COL1A2 antibody [EPR27415-30] is a Rabbit Monoclonal antibody that is used in COL1A2 Dot Blot, Flow Cytometry (Intra), ICC/IF, IHC-P, Western Blot. Suitable for Human samples.

COL1A2 (collagen type I alpha 2) plays a significant role in the tumor microenvironment and cancer progression. It is a component of type I collagen, which is crucial for the structural integrity of the extracellular matrix. High expression levels of COL1A2 have been associated with poor prognosis in various cancers, including gastric cancer. Additionally, COL1A2 can influence tumor growth and metastasis by affecting cell adhesion, migration, and signaling pathways.

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR27415-30
Purification technique	Affinity purification Protein A
Concentration	0.499 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Dot

Tested

Species	Synthetic peptide - Human
Dilution info	1/1000
Notes	-

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/1000
Notes	-

Not recommended

Species	Mouse, Rat, Synthetic peptide - Human
Dilution info	-
Notes	-

IHC-P

Tested

Species	Human
Dilution info	1/10000

Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Not recommended

Species	Mouse, Rat, Synthetic peptide - Human
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/50
Notes	-

Not recommended

Species	Synthetic peptide - Human, Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/50
Notes	-

Not recommended

Species	Synthetic peptide - Human, Mouse, Rat
Dilution info	-
Notes	-

IP

Not recommended

Species	Human, Synthetic peptide - Human, Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information COL1A2

Function	Type I collagen is a member of group I collagen (fibrillar forming collagen).

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

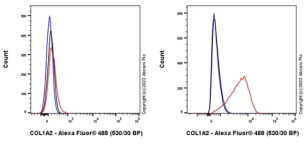
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

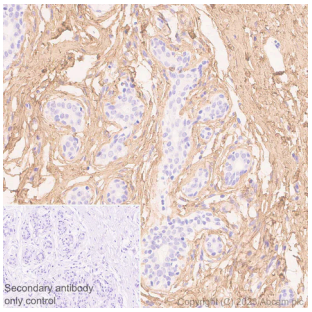
Full details and terms and conditions can be found here:
Terms & Conditions.

8 product images



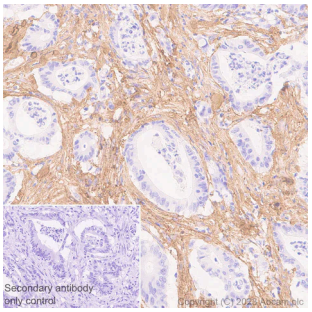
Flow Cytometry (Intracellular) - Anti-COL1A2 antibody [EPR27415-30] (ab308455)

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized HeLa (human cervical adenocarcinoma epithelial cell, Left) / WI-38 (human fetal lung fibroblast, Right) cells labelling COL1A2 with ab308455 at 1/50 dilution (1 ug)/Red (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody. Negative control: HeLa.



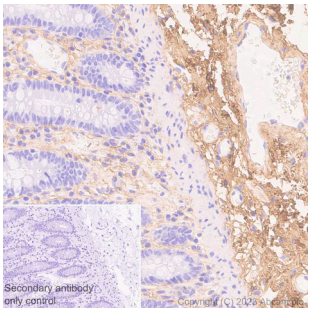
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-COL1A2 antibody [EPR27415-30] (ab308455)

Immunohistochemical analysis of paraffin-embedded Human breast tissue labelling COL1A2 with ab308455 at 1/10000 (0.05 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on interstitial cells in human breast. The section was incubated with ab308455 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND RX instrument. Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins



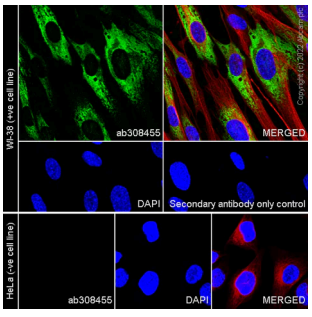
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-COL1A2 antibody [EPR27415-30] (ab308455)

Immunohistochemical analysis of paraffin-embedded Human colon cancer tissue labelling COL1A2 with ab308455 at 1/10000 (0.05 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on interstitial cells in human colon cancer. The section was incubated with ab308455 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND RX instrument. Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-COL1A2 antibody [EPR27415-30] (ab308455)

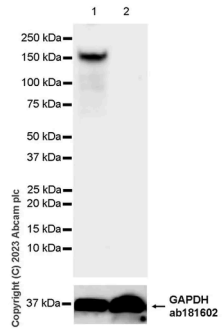
Immunohistochemical analysis of paraffin-embedded Human colon tissue labelling COL1A2 with ab308455 at 1/10000 (0.05 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on interstitial cells in human colon. The section was incubated with ab308455 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND RX instrument. Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins



Immunocytochemistry/ Immunofluorescence - Anti-COL1A2 antibody [EPR27415-30] (ab308455)

COL1A2 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-COL1A2 antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized WI-38 (human fetal lung fibroblast) cells labelling COL1A2 with ab308455 at 1/50 (10.06 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 2ug/ml dilution (Green). Confocal image showing cytoplasmic staining in WI-38 cell line, and no staining was observed in HeLa cell line. Negative control: HeLa.Image was taken with a confocal microscope(Leica-Microsystems, TCS SP8). ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 2.5ug/ml dilution (Red). The Nuclear counterstain was DAPI (Blue). Secondary antibody only control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2ug/ml dilution.



Western blot - Anti-COL1A2 antibody [EPR27415-30] (ab308455)

Blocking and diluting buffer and concentration: 5% NFDM/TBST. Negative control: HeLa. In Western blot, anti-GAPDH antibody (ab181602) loading control staining at 1/200000 dilution. Exposure time: 15 seconds.
All lanes:
Western blot - Anti-COL1A2 antibody [EPR27415-30] (ab308455) at 1/1000 dilution

Lane 1:
WI-38 (human fetal lung fibroblast) whole cell lysate at 20 µg

Lane 2:
HeLa (human cervix adenocarcinoma epithelial cell) whole cell lysate at 20 µg

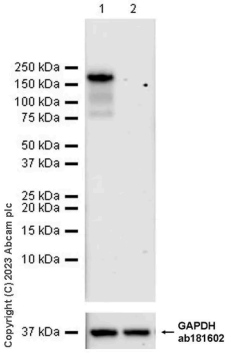
Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 129 kDa

Observed band size: 160 kDa

Exposure time: 15s



Western blot - Anti-COL1A2 antibody [EPR27415-30] (ab308455)

Blocking and diluting buffer and concentration: 5% NFDM/TBST. In Western blot, anti-GAPDH antibody (ab181602) loading control staining at 1/200000 dilution. Exposure time: 73 seconds
All lanes:
Western blot - Anti-COL1A2 antibody [EPR27415-30] (ab308455) at 1/1000 dilution

Lane 1:
WI-38 (human fetal lung fibroblast) whole cell lysate at 20 µg

Lane 2:
WI-38 cells transfected with siRNA specifically targeting COL1A2 whole cell lysate at 20 µg

Secondary

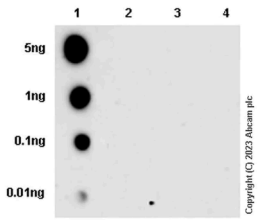
All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 129 kDa

Observed band size: 160 kDa

Exposure time: 73s

Dot Blot - Anti-COL1A2 antibody [EPR27415-30] (ab308455)



Dot blot analysis of COL1A2 using ab308455 at 1:1000 (0.503 ug/ml) followed by a Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ab97051) at 1:100,000 dilution. Exposure time: 3 minutes
Blocking and diluting buffer and concentration: 5% NFDM/TBST

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.