

Product datasheet

Anti-Fibronectin antibody [EPR23110-25] α b268021

KO VALIDATED Recombinant RabMAB

1 References 10 Images

Overview

| | |
|----------------------------|---|
| Product name | Anti-Fibronectin antibody [EPR23110-25] |
| Description | Rabbit monoclonal [EPR23110-25] to Fibronectin |
| Host species | Rabbit |
| Tested applications | Suitable for: IHC-P, IHC-Fr, Flow Cyt, WB Unsuitable for: ICC/IF or IP |
| Species reactivity | Reacts with: Mouse, Rat, Human |
| Immunogen | Synthetic peptide. This information is proprietary to Abcam and/or its suppliers. |
| Positive control | WB: Human serum, plasma, colon and stomach lysate. Mouse and rat plasma. Wild-type HAP1 whole cell lysate. IHC-P: Human mammary gland tissue. Human esophageal squamous cell carcinoma tissue. Mouse stomach and rat liver tissue. IHC-Fr: Mouse and rat colon tissue. Flow Cyt: NIH/3T3 cells. |
| General notes | <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAB[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAB[®] patents.</p> |

Properties

| | |
|-----------------------------|---|
| Form | Liquid |
| Storage instructions | Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle. |
| Storage buffer | pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA |
| Purity | Protein A purified |
| Clonality | Monoclonal |

Clone number EPR23110-25
Isotype IgG

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab268021 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes |
|-------------|-----------|--|
| IHC-P | | 1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. |
| IHC-Fr | | 1/100. Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20). |
| Flow Cyt | | 1/500. |
| WB | | 1/1000. Detects a band of approximately 285 kDa (predicted molecular weight: 262 kDa). |

Application notes Is unsuitable for ICC/IF or IP.

Target

Function Fibronectins bind cell surfaces and various compounds including collagen, fibrin, heparin, DNA, and actin. Fibronectins are involved in cell adhesion, cell motility, opsonization, wound healing, and maintenance of cell shape. Involved in osteoblast compaction through the fibronectin fibrillogenesis cell-mediated matrix assembly process, essential for osteoblast mineralization. Participates in the regulation of type I collagen deposition by osteoblasts. Anastellin binds fibronectin and induces fibril formation. This fibronectin polymer, named superfibronectin, exhibits enhanced adhesive properties. Both anastellin and superfibronectin inhibit tumor growth, angiogenesis and metastasis. Anastellin activates p38 MAPK and inhibits lysophospholipid signaling.

Tissue specificity Plasma FN (soluble dimeric form) is secreted by hepatocytes. Cellular FN (dimeric or cross-linked multimeric forms), made by fibroblasts, epithelial and other cell types, is deposited as fibrils in the extracellular matrix. Ugl-Y1, Ugl-Y2 and Ugl-Y3 are found in urine.

Involvement in disease Glomerulopathy with fibronectin deposits 2

Sequence similarities Contains 12 fibronectin type-I domains.
 Contains 2 fibronectin type-II domains.
 Contains 16 fibronectin type-III domains.

Developmental stage Ugl-Y1, Ugl-Y2 and Ugl-Y3 are present in the urine from 0 to 17 years of age.

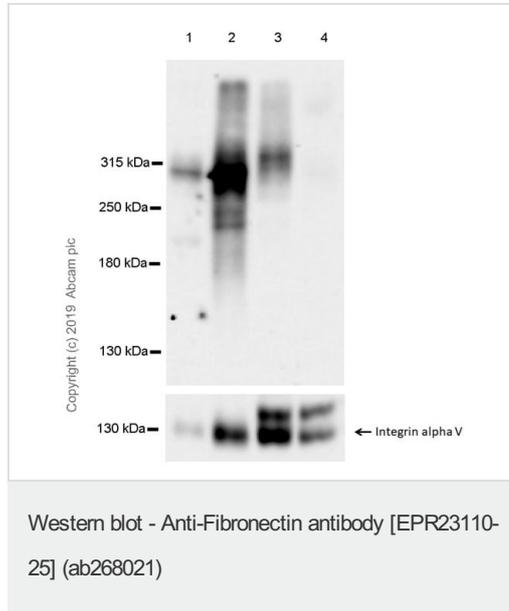
Post-translational modifications Sulfated.
 It is not known whether both or only one of Thr-2064 and Thr-2065 are/is glycosylated. Forms covalent cross-links mediated by a transglutaminase, such as F13A or TGM2, between a glutamine and the epsilon-amino group of a lysine residue, forming homopolymers and heteropolymers (e.g. fibrinogen-fibronectin, collagen-fibronectin heteropolymers).

Phosphorylated by FAM20C in the extracellular medium.
Proteolytic processing produces the C-terminal NC1 peptide, anastellin.

Cellular localization

Secreted, extracellular space, extracellular matrix.

Images



All lanes : Anti-Fibronectin antibody [EPR23110-25] (ab268021) at 1/1000 dilution

Lane 1 : Human colon lysate at 20 μ g

Lane 2 : Human stomach lysate at 20 μ g

Lane 3 : Wild-type HAP1 whole cell lysate at 40 μ g

Lane 4 : Fibronectin knockout HAP1 whole cell lysate at 40 μ g

Secondary

Lanes 1-2 : VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/1000 dilution

Lanes 3-4 : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 262 kDa

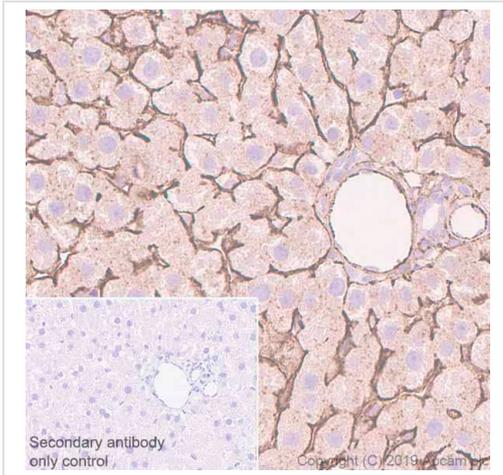
Observed band size: 285 kDa

Blocking and dilution buffer: 5% NFD/MTBST.

Exposure time: 44 seconds.

The expression molecular weight observed is consistent with what has been described in the literature (PMID:28367057).

ab268021 was shown to specifically react with Fibronectin in wild-type HAP1 cells as signal was lost in Fibronectin knockout cells. Wild-type and Fibronectin knockout samples were subjected to SDS-PAGE. ab268021 and ab179475 (Rabbit anti-Integrin alpha V loading control) were incubated 1 hour at room temperature at 1/1000 dilution and 1/5000 dilution respectively. Blots were developed with Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ab97051) secondary antibody at 1/100,000 dilution for 1 hour at room temperature before imaging. The blot was developed on a BIO-RAD[®] ChemiDoc[™] MP instrument using the ECL technique.



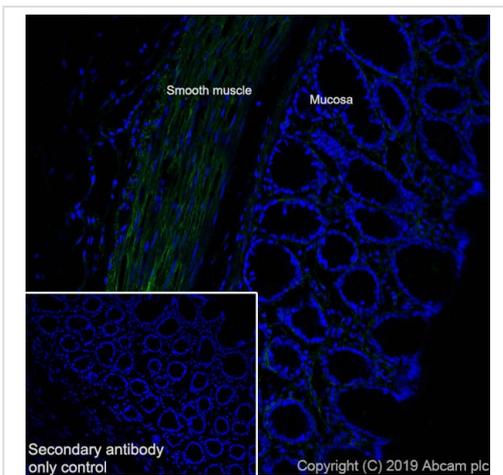
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Fibronectin antibody [EPR23110-25] (ab268021)

Immunohistochemical analysis of paraffin-embedded rat liver tissue labeling Fibronectin with ab268021 at 1/2000 dilution (0.23 µg/ml) followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Positive staining in the perivascular tissue of sinusoids of rat liver (PMID:650101). Counterstained with hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Heat mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0).



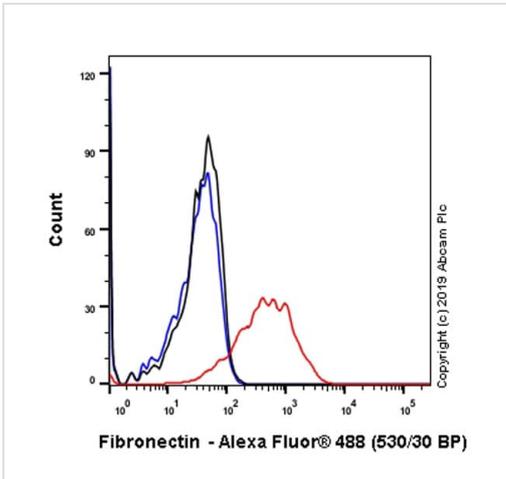
Immunohistochemistry (Frozen sections) - Anti-Fibronectin antibody [EPR23110-25] (ab268021)

Immunohistochemical analysis of frozen section of 4% PFA-fixed, 0.2% Triton X-100 permeabilized rat colon tissue labeling

Fibronectin with ab268021 at 1/100 dilution followed by ab150077 AlexaFluor®488 Goat anti-Rabbit secondary antibody at 1/1000 dilution (Green). Positive staining mainly on smooth muscle of rat colon (PMID: 17881565). The nuclear counterstain is DAPI (Blue).

Secondary antibody only control: Secondary antibody is ab150077 AlexaFluor®488 Goat anti-Rabbit secondary antibody at 1/1000 dilution.

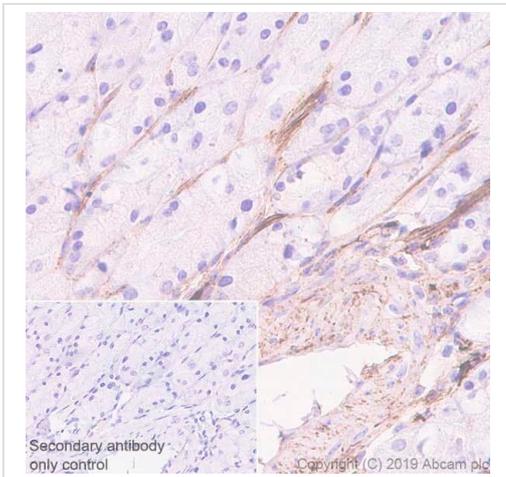
Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).



Flow Cytometry - Anti-Fibronectin antibody
[EPR23110-25] (ab268021)

Flow cytometric analysis of NIH/3T3 (mouse embryonic fibroblast) cells labeling Fibronectin with ab268021 at 1/500 dilution (Red) compared with a Rabbit monoclonal IgG ([ab172730](#)) (Black) isotype control and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor[®] 488, [ab150077](#)) at 1/2000 dilution was used as the secondary antibody.

Gated on viable cells.

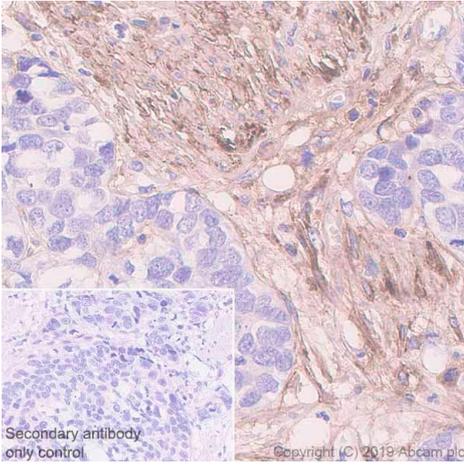


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Fibronectin antibody
[EPR23110-25] (ab268021)

Immunohistochemical analysis of paraffin-embedded mouse stomach tissue labeling Fibronectin with ab268021 at 1/2000 dilution (0.23 µg/ml) followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Positive staining in the smooth muscle of mouse stomach (PMID:650101). Counterstained with hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Heat mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0).

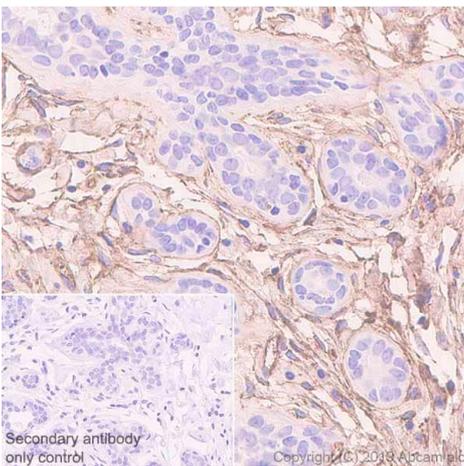


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Fibronectin antibody [EPR23110-25] (ab268021)

Immunohistochemical analysis of paraffin-embedded human esophageal squamous cell carcinoma tissue labeling Fibronectin with ab268021 at 1/2000 dilution (0.23 µg/ml) followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Positive staining in the stroma of human esophageal squamous cell carcinoma (PMID:30314454). Counterstained with hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Heat mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0).

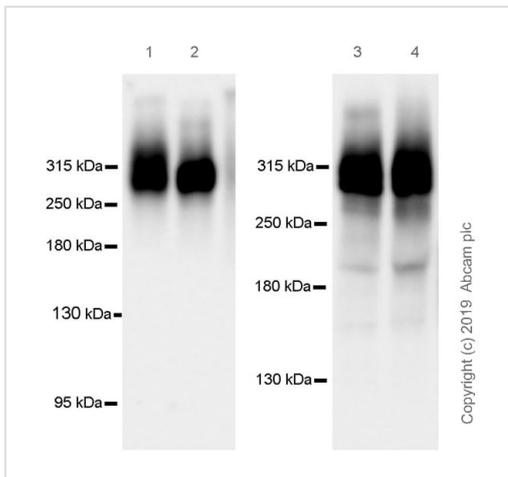


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Fibronectin antibody [EPR23110-25] (ab268021)

Immunohistochemical analysis of paraffin-embedded human mammary gland tissue labeling Fibronectin with ab268021 at 1/2000 dilution (0.23 µg/ml) followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Positive staining in the stroma of human mammary gland (PMID:650101). Counterstained with hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Heat mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0).



Western blot - Anti-Fibronectin antibody [EPR23110-25] (ab268021)

All lanes : Anti-Fibronectin antibody [EPR23110-25] (ab268021) at 1/1000 dilution

Lane 1 : Human serum

Lane 2 : Human plasma

Lane 3 : Mouse plasma

Lane 4 : Rat plasma

Lysates/proteins at 20 µg per lane.

Secondary

Lanes 1-2 : VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/1000 dilution

Lanes 3-4 : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

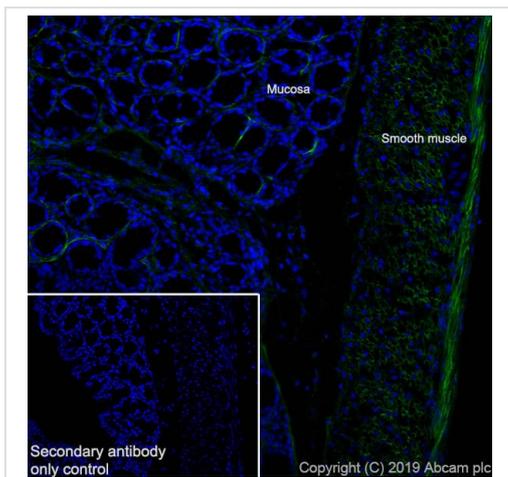
Predicted band size: 262 kDa

Observed band size: 285 kDa

Blocking and dilution buffer: 5% NFDM/TBST.

Exposure time: 3.25 seconds.

The expression molecular weight observed is consistent with what has been described in the literature (PMID:28367057).



Immunohistochemistry (Frozen sections) - Anti-Fibronectin antibody [EPR23110-25] (ab268021)

Immunohistochemical analysis of frozen section of 4% PFA-fixed, 0.2% Triton X-100 permeabilized mouse colon tissue labeling Fibronectin with ab268021 at 1/100 dilution followed by ab150077 AlexaFluor®488 Goat anti-Rabbit secondary antibody at 1/1000 dilution (Green). Positive staining mainly on smooth muscle of mouse colon (PMID: 17881565). The nuclear counterstain is DAPI (Blue).

Secondary antibody only control: Secondary antibody is ab150077 AlexaFluor®488 Goat anti-Rabbit secondary antibody at 1/1000 dilution.

Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).

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Anti-Fibronectin antibody [EPR23110-25] (ab268021)

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