abcam

ab219366

Anti-Fibronectin antibody [F1] - Low endotoxin, Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	F1
Purification technique	Affinity purification Protein A
Concentration	1.013 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ICC/IF

Tested

Species	Human
Dilution info	-

Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	ab199376 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

IHC-P

Tested

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

Target data

See full target information FN1

Function	Fibronectins bind cell surfaces and various compounds including collagen, fibrin, heparin, DNA, and actin (PubMed:3024962, PubMed:3593230, PubMed:3900070, PubMed:7989369). Fibronectins are involved in cell adhesion, cell motility, opsonization, wound healing, and maintenance of cell shape (PubMed:3024962, PubMed:3593230, PubMed:3900070, PubMed:7989369). Involved in osteoblast compaction through the fibronectin fibrillogenesis cell-mediated matrix assembly process, essential for osteoblast mineralization (By similarity). Participates in the regulation of type I collagen deposition by osteoblasts (By similarity). Acts as a ligand for the LILRB4 receptor, inhibiting FCGR1A/CD64-mediated monocyte

activation (PubMed:34089617). 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. Secreted by contracting muscle, induces liver autophagy, a degradative pathway for nutrient mobilization and damage removal, and systemic insulin sensitization via hepatic ITGA5:ITGB1 integrin receptor signaling.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab219366 is the carrier-free version of ab32419.

Species reactivity
Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

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.

Conjugation ready
Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

What does low endotoxin mean?
Our low endotoxin, azide-free formats have low endotoxin level (1 EU/mg, determined by the TAL assay) and are free from azide, to achieve consistent experimental results in functional assays.

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

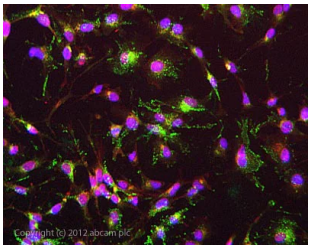
We do not recommend this combination. It is not covered by our product promise.

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.

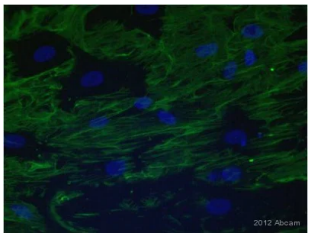
6 product images



Immunocytochemistry/ Immunofluorescence - Anti-Fibronectin antibody [F1] - Low endotoxin, Azide free (ab219366)

Fibronectin Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Fibronectin antibody

ICC/IF image of unpurified ab32419 stained HepG2 (Human liver hepatocellular carcinoma cell line) cells. The cells were fixed in 4% formaldehyde (10 minutes) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1 hour to permeabilize the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody ab32419 at 1/100 dilution overnight at +4°C. The secondary antibody (green) was DyLight® 488 goat anti- rabbit (ab96899) IgG (H+L) used at a 1/1000 dilution for 1 hour. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1 hour. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43 µM.
This data was developed using the same antibody clone in a different buffer formulation containing PBS BSA glycerol and sodium azide (ab32419).

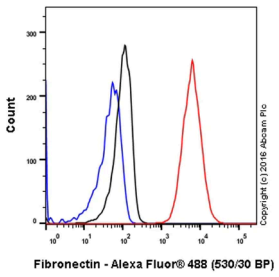


This image is courtesy of an anonymous customer review.

Immunocytochemistry/ Immunofluorescence - Anti-Fibronectin antibody [F1] - Low endotoxin, Azide free (ab219366)

Fibronectin Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Fibronectin antibody

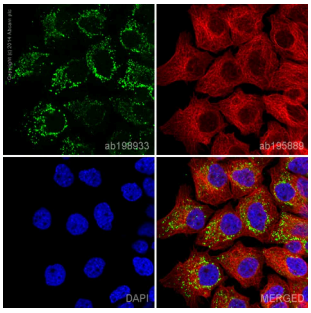
ICC/IF image of unpurified ab32419 stained human mesenchymal stem cells. The cells were fixed in paraformaldehyde and then incubated in 0.1%BSA / 1% goat serum for 30 minutes, to block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab32419, 1/100 dilution) for 2 hours at 22°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG. DAPI was used to stain the cell nuclei (blue).
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab32419).



Flow Cytometry (Intracellular) - Anti-Fibronectin antibody [F1] - Low endotoxin, Azide free (ab219366)

Fibronectin Flow Cytometry (Intracellular) staining using rabbit Anti-Fibronectin antibody

Intracellular Flow Cytometry analysis of HepG2 (Human liver hepatocellular carcinoma cell line) cells labeling Fibronectin with purified ab32419 at 1/20 dilution (10 µg/mL) (red). Cells were fixed with 4% paraformaldehyde and permeabilized with 90% methanol. A Goat anti rabbit IgG (Alexa Fluor®488) at 1/2000 dilution was used as the secondary antibody. Rabbit monoclonal IgG (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) was used as the unlabeled control.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab32419).

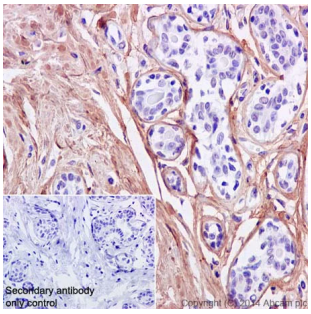


Immunocytochemistry/ Immunofluorescence - Anti-Fibronectin antibody [F1] - Low endotoxin, Azide free (ab219366)

Fibronectin Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Fibronectin antibody

Clone F1 (ab219366) has been successfully conjugated by Abcam. This image was generated using Anti-Fibronectin antibody [F1] (Alexa Fluor® 488). Please refer to ab198933 for protocol details. ab198933 staining Fibronectin in A431 (Human epidermoid carcinoma cell line) cells. The cells were fixed with 4% formaldehyde (10 minutes), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1 hour. The cells were then incubated overnight at +4°C with ab198933 at a 1/100 dilution (shown in green) and ab195889, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 594), at a 1/250 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue).

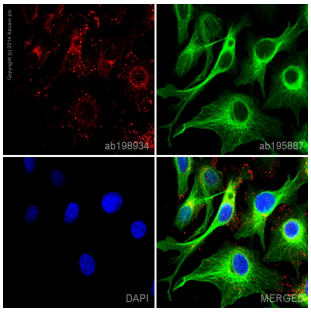
Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Fibronectin antibody [F1] - Low endotoxin, Azide free (ab219366)

Fibronectin Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Fibronectin antibody

Immunohistochemical staining of paraffin embedded human breast carcinoma with purified ab32419 at a dilution of 1/250. The secondary antibody used is ab97051 a HRP-conjugated goat anti-rabbit IgG (H+L) at a dilution of 1/500. The sample is counter-stained with hematoxylin. Antigen retrieval was perfomed using Tris-EDTA buffer pH 9.0. PBS was used instead of the primary antibody as the negative control and is shown in the inset.
This data was developed using the same antibody clone in a different buffer formulation containing PBS BSA glycerol and sodium azide (ab32419).



Immunocytochemistry/ Immunofluorescence - Anti-Fibronectin antibody [F1] - Low endotoxin, Azide free (ab219366)

Fibronectin Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Fibronectin antibody

Clone F1 (ab219366) has been successfully conjugated by Abcam. This image was generated using Anti-Fibronectin antibody [F1] (Alexa Fluor® 647). Please refer to ab198934 for protocol details.ab198934 staining Fibronectin in HepG2 cells. The cells were fixed with 4% formaldehyde (10 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab198934 at 1/100 dilution (shown in red) and ab195887, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 488), at 1/250 dilution (shown in green). Nuclear DNA was labelled with DAPI (shown in blue).Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).This product also gave a positive signal under the same testing conditions in HepG2 cells fixed with 100% methanol (5min).

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