

Product datasheet

Anti-Fibronectin antibody [F1] ab32419

Recombinant RabMAb

★★★★★ [7 Abreviews](#) [105 References](#) [7 Images](#)

Overview

Product name	Anti-Fibronectin antibody [F1]
Description	Rabbit monoclonal [F1] to Fibronectin
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), WB, IHC-P, ICC/IF
Species reactivity	Reacts with: Human
Immunogen	Recombinant full length protein within Human Fibronectin aa 1-2400. The exact sequence is proprietary. Database link: P02751
Positive control	WB: Human serum and plasma. SK-OV-3 and HepG2 cell lysate. IHC-P: Human breast carcinoma tissue. ICC/IF: HepG2 and human mesenchymal stem cells. Flow Cyt (intra): HepG2 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> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</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. Avoid freeze / thaw cycle.
Storage buffer	<p>pH: 7.20</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: PBS, 40% Glycerol, 0.05% BSA</p>

Purity	Protein A purified
Clonality	Monoclonal
Clone number	F1
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab32419 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
Flow Cyt (Intra)		1/20.
WB	★★★★★ (3)	1/1000. Predicted molecular weight: 263 kDa.
IHC-P	★★★★★ (2)	1/250 - 1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF	★★★★★ (1)	1/150.

Target

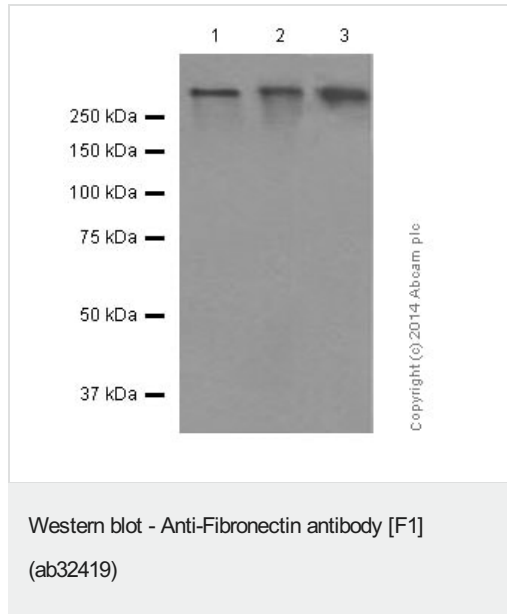
Function	<p>Fibronectins bind cell surfaces and various compounds including collagen, fibrin, heparin, DNA, and actin. Fibronectins are involved in cell adhesion, cell motility, opsonization, wound healing, and maintenance of cell shape. Involved in osteoblast compaction through the fibronectin fibrillogenesis cell-mediated matrix assembly process, essential for osteoblast mineralization. Participates in the regulation of type I collagen deposition by osteoblasts.</p> <p>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.</p>
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	<p>Contains 12 fibronectin type-I domains.</p> <p>Contains 2 fibronectin type-II domains.</p> <p>Contains 16 fibronectin type-III domains.</p>
Developmental stage	Ugl-Y1, Ugl-Y2 and Ugl-Y3 are present in the urine from 0 to 17 years of age.
Post-translational modifications	<p>Sulfated.</p> <p>It is not known whether both or only one of Thr-2064 and Thr-2065 are/is glycosylated.</p> <p>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).</p> <p>Phosphorylated by FAM20C in the extracellular medium.</p>

Proteolytic processing produces the C-terminal NC1 peptide, anastellin.

Cellular localization

Secreted, extracellular space, extracellular matrix.

Images



All lanes : Anti-Fibronectin antibody [F1] (ab32419) at 1/5000 dilution (purified)

Lane 1 : Human serum

Lane 2 : Human plasma

Lane 3 : SK-OV-3 (Human ovarian cancer cell line) cell lysate

Lysates/proteins at 20 µg per lane.

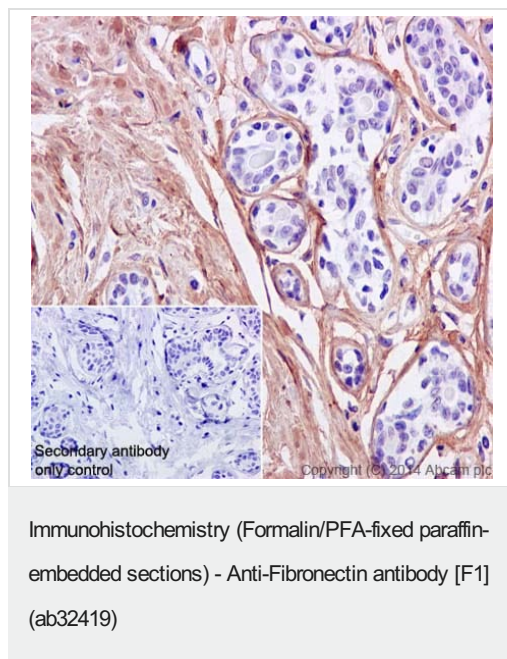
Secondary

All lanes : HRP goat anti-rabbit (H+L) at 1/1000 dilution

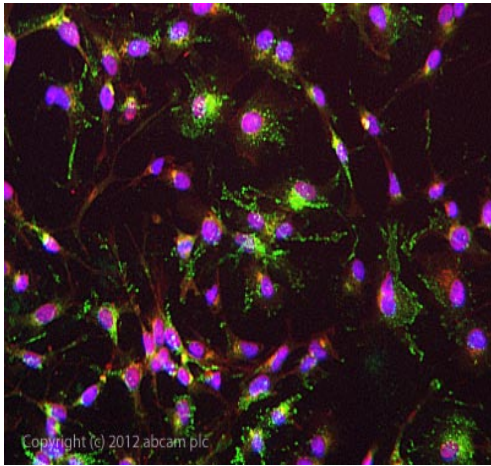
Predicted band size: 263 kDa

Observed band size: 263 kDa

Blocking/Dilution buffer: 5% NFDM/TBST



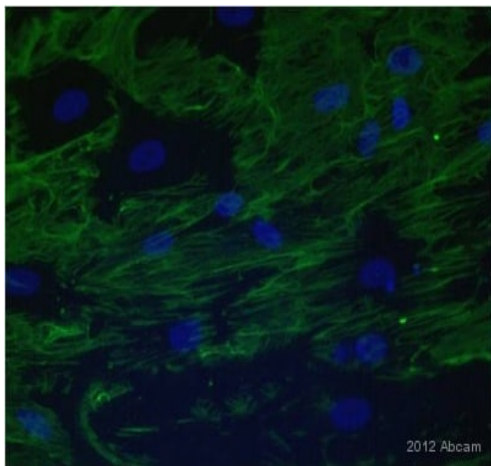
Immunohistochemical staining of paraffin embedded human breast carcinoma with purified ab32419 at a dilution of 1/250. The secondary antibody used is **ab97051**, a HRP-conjugated goat anti-rabbit IgG (H+L), at a dilution of 1/500. The sample is counter-stained with hematoxylin. Antigen retrieval was performed 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.



Immunocytochemistry/ Immunofluorescence - Anti-Fibronectin antibody [F1] (ab32419)

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.

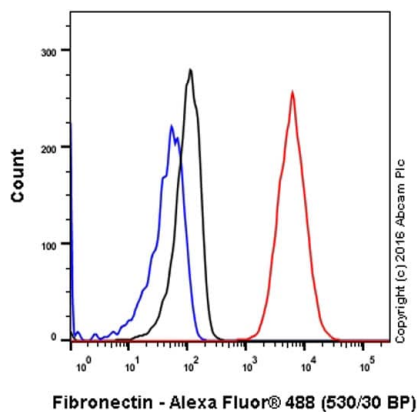
Alexa Fluor® 488 ([ab198933](#)) and Alexa Fluor® 647 ([ab198934](#)) conjugated versions are available for this clone.



Immunocytochemistry/ Immunofluorescence - Anti-Fibronectin antibody [F1] (ab32419)

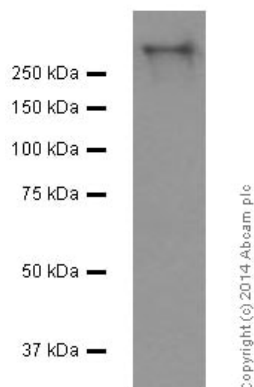
This image is courtesy of an anonymous abreview.

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).



Flow Cytometry (Intracellular) - Anti-Fibronectin antibody [F1] (ab32419)

Intracellular Flow Cytometry analysis of HepG2 (Human liver hepatocellular carcinoma cell line) cells labeling Fibronectin with purified ab32419 at 1/20 dilution (10µg/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.



Western blot - Anti-Fibronectin antibody [F1] (ab32419)

Anti-Fibronectin antibody [F1] (ab32419) at 1/1000 dilution (purified) + HepG2 (Human liver hepatocellular carcinoma cell line) cell lysate at 20 µg

Secondary



HRP goat anti-rabbit (H+L) at 1/1000 dilution

Predicted band size: 263 kDa

Observed band size: 263 kDa

Blocking/Dilution buffer: 5% NFDM/TBST

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-Fibronectin antibody [F1] (ab32419)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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