

Product datasheet

Anti-Fibronectin antibody [F14] (Alexa Fluor® 647) ab246736

Recombinant RabMAb

3 Images

Overview

Product name	Anti-Fibronectin antibody [F14] (Alexa Fluor® 647)
Description	Rabbit monoclonal [F14] to Fibronectin (Alexa Fluor® 647)
Host species	Rabbit
Conjugation	Alexa Fluor® 647. Ex: 652nm, Em: 668nm
Tested applications	Suitable for: ICC/IF, Flow Cyt
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	ICC/IF: HepG2 cells. Flow Cytometry: 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>Alexa Fluor® is a registered trademark of Molecular Probes, Inc, a Thermo Fisher Scientific Company. The Alexa Fluor® dye included in this product is provided under an intellectual property license from Life Technologies Corporation. As this product contains the Alexa Fluor® dye, the purchase of this product conveys to the buyer the non-transferable right to use the purchased product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). As this product contains the Alexa Fluor® dye the sale of this product is expressly conditioned on the buyer not using the product or its components, or any materials made using the product or its components, in any activity to generate revenue, which may include, but is not limited to use of the product or its components: in manufacturing; (ii) to provide a service, information, or data in return for payment (iii) for therapeutic, diagnostic or prophylactic purposes; or (iv) for resale, regardless of whether they are sold for use in research. For information on purchasing a license to this product for purposes other than research, contact</p>

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Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been "predicted to work with," however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

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. Stable for 12 months at -20°C. Store In the Dark.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: 30% Glycerol, PBS, 1% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	F14
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab246736** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

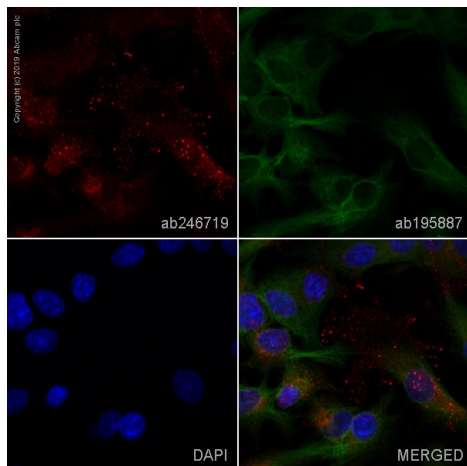
Application	Abreviews	Notes
ICC/IF		1/100. This product gave a positive signal in HepG2 fixed with 4% formaldehyde (10 min) and 100% methanol (5 min).

Application	Abreviews	Notes
Flow Cyt		1/2500.

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	<p>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.</p>
Involvement in disease	<p>Glomerulopathy with fibronectin deposits 2</p>
Sequence similarities	<p>Contains 12 fibronectin type-I domains. Contains 2 fibronectin type-II domains. Contains 16 fibronectin type-III domains.</p>
Developmental stage	<p>Ugl-Y1, Ugl-Y2 and Ugl-Y3 are present in the urine from 0 to 17 years of age.</p>
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> <p>Proteolytic processing produces the C-terminal NC1 peptide, anastellin.</p>
Cellular localization	<p>Secreted, extracellular space, extracellular matrix.</p>

Images

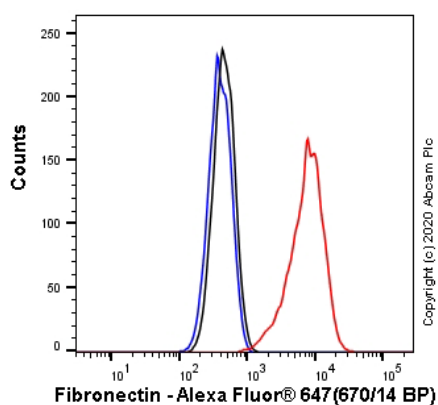


Immunocytochemistry/ Immunofluorescence - Anti-Fibronectin antibody [F14] (Alexa Fluor® 647) (ab246736)

ab246736 staining Fibronectin in HepG2 cells. The cells were fixed with 100% methanol (5 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 ab246736 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 4% formaldehyde (10 min).



Flow Cytometry - Anti-Fibronectin antibody [F14] (Alexa Fluor® 647) (ab246736)

Overlay histogram showing HepG2 cells stained with ab246736 (red line). The cells were fixed with 80 % methanol (5 min) and then permeabilized with 0.1 % PBS-Triton X-100 for 15 min. The cells were then incubated in 1x PBS containing 10 % normal goat serum to block non-specific protein-protein interaction followed by the antibody (ab246736) (1×10^6 in 100µl at 0.2µg/ml (1/2500)) for 30 min at 22°C.

Isotype control antibody (black line) was Rabbit IgG (monoclonal) Alexa Fluor® 647 (ab199093) used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control.

Acquisition of >5,000 events were collected using a 40 mW Red laser (640nm) and 670/14 bandpass filter.

This antibody gave a positive signal in HepG2 cells fixed with 4 % formaldehyde (10 min) / permeabilized with 0.1 % PBS-Triton X-100 for 15 min used under the same conditions.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-Fibronectin antibody [F14] (Alexa Fluor® 647)
(ab246736)

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

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