abcam

Product datasheet

Anti-Fibronectin antibody ab2413

88 Abreviews 832 References 5 Images

Overview

Product name	Anti-Fibronectin antibody
Description	Rabbit polyclonal to Fibronectin
Host species	Rabbit
Tested applications	**Suitable for:** ICC/IF, WB, IHC-P
Species reactivity	**Reacts with:** Mouse, Human
Immunogen	Full length native protein (purified) corresponding to Human Fibronectin. Fibronectin isolated from a pool of normal human plasma.
Positive control	WB: Human colon tissue lysate, HepG2, NIH 3T3 whole cell lysate. IHC-P: Human kidney tissue. ICC: HeLa cells.
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. 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, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C.
Storage buffer	pH: 7.50 Preservative: 0.05% Sodium azide Constituents: 99.854% PBS, 0.096% BSA
Purity	Affinity purified
Clonality	Polyclonal
Isotype	IgG
Light chain type	unknown

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab2413 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	★★★★★ (28)	Use at an assay dependent concentration.
WB	★★★★★ (31)	Use at an assay dependent concentration. Detects a band of approximately 285 kDa (predicted molecular weight: 262 kDa).
IHC-P	★★★★★ (14)	Use at an assay dependent concentration.

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

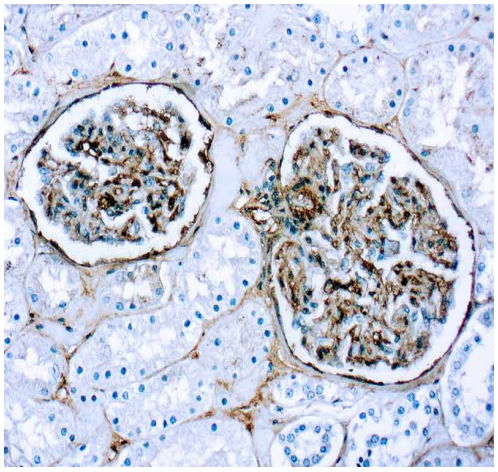
Sequence similarities Contains 12 fibronectin type-I domains.
Contains 2 fibronectin type-II domains.
Contains 16 fibronectin type-III domains.

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.

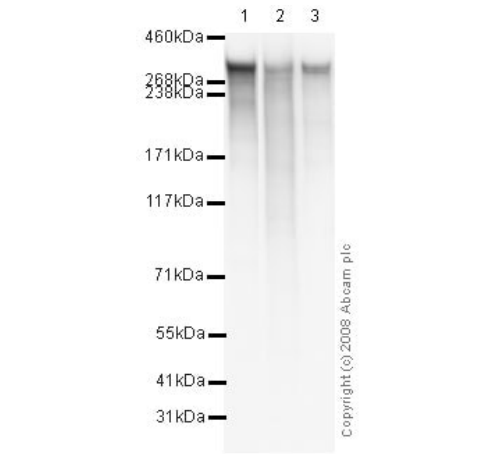
Cellular localization Secreted, extracellular space, extracellular matrix.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Fibronectin antibody (ab2413)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human kidney tissue labelling Fibronectin with ab2413 at 1/50 dilution. Antigen retrieval performed with EDTA buffer pH 8 before commencing with IHC staining protocol.



Western blot - Anti-Fibronectin antibody (ab2413)

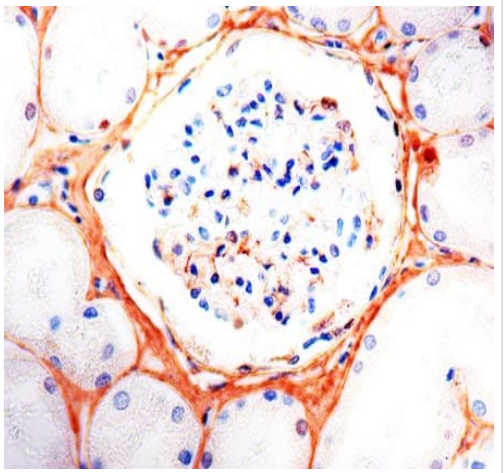
All lanes : Anti-Fibronectin antibody (ab2413) at 1 µg/ml

Lane 1 : Human colon tissue lysate
Lane 2 : HepG2 (Human hepatocellular liver carcinoma cell line) Whole Cell Lysate
Lane 3 : NIH 3T3 (Mouse embryonic fibroblast cell line) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

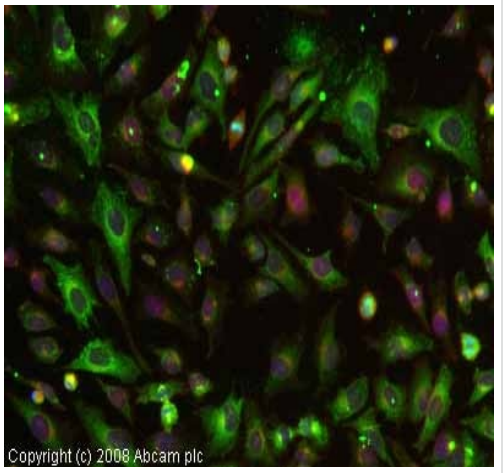
Secondary
All lanes : Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Predicted band size: 262 kDa
Observed band size: 285 kDa



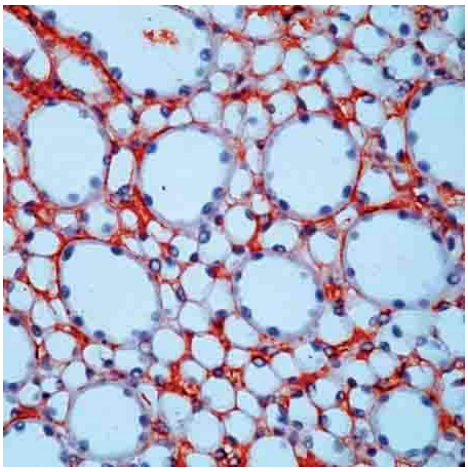
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Fibronectin antibody (ab2413)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded human kidney tissue, staining Fibronectin with ab2413.



Immunocytochemistry/ Immunofluorescence - Anti-Fibronectin antibody (ab2413)

ICC/IF image of ab2413 stained HeLa cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab2413, 1 µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue). This antibody also gave a positive IF result in Hek293, HepG2 and MCF7 cells.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Fibronectin antibody (ab2413)

ab2413 staining Fibronectin in human kidney tissue section by IHC-P (Formalin/PFA-fixed paraffin embedded tissue sections). Tissue sections were incubated with ab2413 at a dilution of 1:250 for one hour. Heat mediated antigen retrieval technique was used with citrate buffer at pH 6.0. DAB staining was done with a biotinylated secondary for 45 min at RT at a concentration of 1:1000.

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