abcam

Product datasheet

Anti-Fibronectin antibody [F14] ab45688





重组 RabMAb

★★★★★ 5 Abreviews 94 References 8 图像

概述

产品名称 Anti-Fibronectin抗体[F14]

描述 兔单克隆抗体[F14] to Fibronectin

宿主 Rabbit

经测试应用 适用于: Flow Cyt (Intra), WB, ICC/IF

不适用于: IHC-P

种属反应性 与反应: Mouse, Rat, Human

免疫原 Recombinant full length protein corresponding to Human Fibronectin aa 1-2400.

Database link: P02751

阳性对照 WB: Human, mouse and rat serum lysate. IHC-Fr: Rat kidney tissue. ICC/IF: HepG2 cells.

常规说明 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 production For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle.

存储溶液 pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.21% BSA

纯度 Protein A purified

克隆 单克隆 克隆编号 F14

同种型 IgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab45688于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Flow Cyt (Intra)		1/150.
WB		1/1000 - 1/10000. Detects a band of approximately 263 kDa (predicted molecular weight: 263 kDa).
ICC/IF		1/500. For unpurified use at 1/250.

应用说明

Is unsuitable for IHC-P.

靶标

功能 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.

组织特异性 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.

疾病相关 Glomerulopathy with fibronectin deposits 2

序列相似性 Contains 12 fibronectin type-I domains.

Contains 2 fibronectin type-II domains.

Contains 16 fibronectin type-III domains.

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

翻译后修饰 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

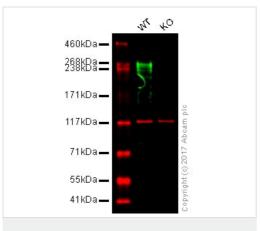
glutamine and the epsilon-amino group of a lysine residue, forming homopolymers and heteropolymers (e.g. fibrinogen-fibronectin, collagen-fibronectin heteropolymers).

Phosphorylated by FAM20C in the extracellular medium.

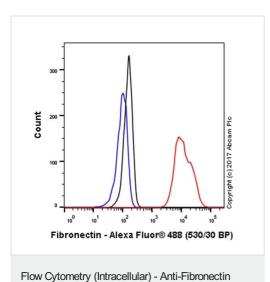
Proteolytic processing produces the C-terminal NC1 peptide, anastellin.

细胞定位 Secreted, extracellular space, extracellular matrix.

图片



Western blot - Anti-Fibronectin antibody [F14] (ab45688)



antibody [F14] (ab45688)

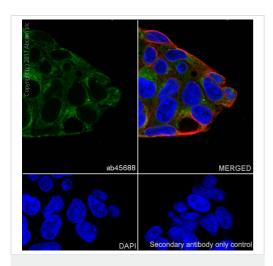
Lane 1: Wild-type HAP1 whole cell lysate (20 µg)

Lane 2: Fibronectin knockout HAP1 whole cell lysate (20 µg)

Lanes 1 - 2: Merged signal (red and green). Green - ab45688 observed at 262 kDa. Red - loading control, **ab18058**, observed at 130 kDa.

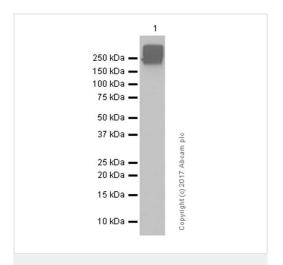
ab45688 was shown to react with Fibronectin in wild-type HAP1 cells as signal was lost in Fibronectin knockout cells. Wild-type and Fibronectin knockout samples were subjected to SDS-PAGE. Ab45688 and ab18058 (Mouse anti-Vinculin loading control) were incubated overnight at 4°C at 1/500 dilution and 1/2000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed ab216773 and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed ab216776 secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.

Intracellular Flow Cytometry analysis of HepG2 (Human hepatocellular carcinoma epithelial cell) cells labeling Fibronectin with purified ab45688 at 1/150 dilution (10µg/ml) (red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluor[®] 488) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Immunocytochemistry/ Immunofluorescence - Anti-Fibronectin antibody [F14] (ab45688)

Immunocytochemistry/ Immunofluorescence analysis of HepG2 (Human hepatocellular carcinoma epithelial cell) cells labeling Fibronectin with Purified ab45688 at 1:500 dilution. Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200. ab150077 Goat anti rabbit lgG(Alexa Fluor® 488) was used as the secondary antibody at 1:1000 dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Western blot - Anti-Fibronectin antibody [F14] (ab45688)

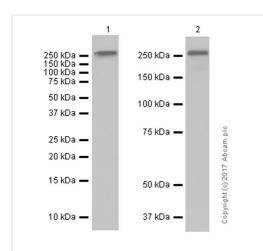
Anti-Fibronectin antibody [F14] (ab45688) at 1/10000 dilution (purified) + Human serum lysates at 15 µg

Secondary

Anti-Rabbit lgG (HRP), specific to the non-reduced form of lgG at 1/2000 dilution

Predicted band size: 263 kDa

Blocking and diluting buffer: 5% NFDM/TBST.



Western blot - Anti-Fibronectin antibody [F14] (ab45688)

All lanes : Anti-Fibronectin antibody [F14] (ab45688) at 1/10000 dilution (purified)

Lane 1: Mouse serum lysates

Lane 2: Rat serum lysates

Lysates/proteins at 15 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

Predicted band size: 263 kDa
Observed band size: 263 kDa

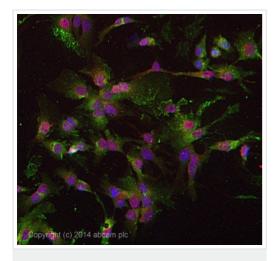
Blocking and diluting buffer: 5% NFDM/TBST

kDa 250-150-100-75-

Western blot - Anti-Fibronectin antibody [F14] (ab45688)

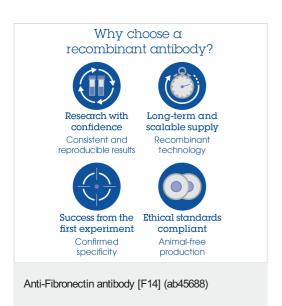
Anti-Fibronectin antibody [F14] (ab45688) at 1/5000 dilution (unpurified) + human serum

Predicted band size: 263 kDa Observed band size: 263 kDa



Immunocytochemistry/ Immunofluorescence - Anti-Fibronectin antibody [F14] (ab45688)

ICC/IF image of unpurified ab45688 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 ab45688 at 1/250 dilution overnight at +4°C. The secondary antibody (pseudo-colored green) was Alexa Fluor® 488 goat antirabbit (ab150081) lgG (H+L) preadsorbed, used at a 1/1000 dilution for 1 hour. Alexa Fluor® 594 WGA was used to label plasma membranes (pseudo-colored red) at a 1/200 dilution for 1 hour at room temperature. DAPI was used to stain the cell nuclei (pseudo-colored blue) at a concentration of 1.43 μ M for 1 hour at room temperature.



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