Datasheet for ABIN5596761

anti-Fibronectin 1 antibody

5 Images

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Overview

Quantity:	500 µg
Target:	Fibronectin 1 (FN1)
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Fibronectin 1 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Immunoprecipitation (IP)

Product Details

Purpose:	Fibronectin Antibody
Immunogen:	Immunogen: Fibronectin was purified from Human plasma by binding to a denatured gelatin column followed by elution with high concentrations of arginine. The eluted material was further purified by gel filtration. Immunization occurred after single-band purity was assessed by SDS-PAGE. Immunogen Type: Native Protein
Isotype:	IgG
Cross-Reactivity (Details):	Typically less than 1 % cross reactivity against other extracellular matrix proteins was detected by ELISA against purified standards.
Characteristics:	Synonyms: rabbit anti-Fibronectin antibody, FN1, FN, Cold-insoluble globulin, CIG, Anastellin, Ugl-Y1, Ugl-Y2, Ugl-Y3
Purification:	This product has been prepared by immunoaffinity chromatography using immobilized

Product Details

	antigens followed by extensive cross-adsorption against human serum proteins and collagen and non-collagen extracellular matrix proteins to remove any unwanted specificities.
Sterility:	Sterile filtered

Target Details

Target:	Fibronectin 1 (FN1)
Alternative Name:	FN1 (FN1 Products)
Background:	Background: Human fibronectin has a molecular weight of 450,000 daltons when purified in an intact form from plasma. Fibronectin is a glycoprotein synthesized in the liver for the circulating blood plasma form, and is synthesized by many mesenchymal cells, for the extracellular matrix form. It is composed of two similar, but not identical protein chains, which are linked by two disulfide linkages at the C-terminal end of the chains. The chains are composed of domains which have specific secondary structures linked together by regions which are especially susceptible to proteolytic action. For this reason, detection by immunoblot (western) may show considerable variability in the observed apparent molecular weights, which is predicated on the source of the fibronectin, and to what degree proteolysis has occurred. Bands approximately 225 kDa should be observed after SDS-PAGE when reducing and denaturing conditions are used.
Gene ID:	2335
UniProt:	P02751
Pathways:	Cellular Response to Molecule of Bacterial Origin, Carbohydrate Homeostasis, Autophagy

Application Details

Application Notes:	Immunohistochemistry Dilution: 1:50 - 1:200 Application Note: Anti-Fibronectin antibodies have been used for indirect trapping ELISA for quantitation of antigen in serum using a standard curve, for immunoprecipitation and for western blotting for highly sensitive qualitative analysis. Rockland's anti-Fibronectin detects intact fibronectin (Invitrogen, Cat. No. 33016-015) by western blot after digestion by Matrix Metalloproteinase-3 (MMP-3) overnight at 37° C. Separation was performed using a 4-12 % Tris-Glycine gel. Under these conditions a sizeable, dark band at ~220 kDa representing the undigested fibronectin, as well as many, smaller bands representing the variably sized fragments resulting from fibronectin digestion by MMP-3 were noted. For immunohistochemistry paraffin embedded tissue preparation is recommended.

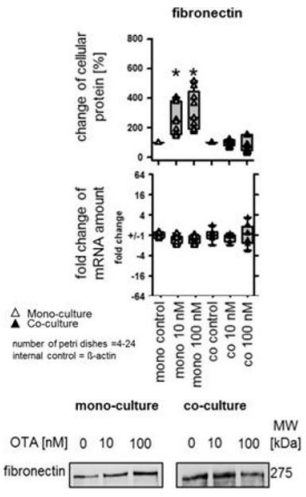
Application Details

	Western Blot Dilution: 1:5,000 - 1:10,000 Immunoprecipitation Dilution: 1:100 ELISA Dilution: 1:5,000 - 1:10,000 Other: User Optimized
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1.0 mg/mL
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 Stabilizer: None Preservative: 0.01 % (w/v) Sodium Azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Store vial at 4° C prior to opening. This product is stable at 4° C as an undiluted liquid. Dilute only prior to immediate use. For extended storage mix with an equal volume of glycerol, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing.
Expiry Date:	12 months

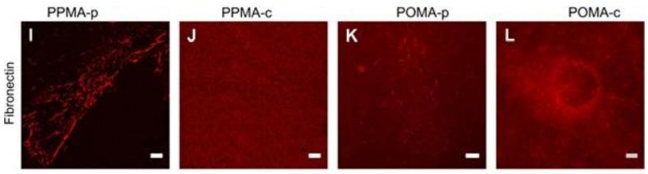
Images



Western Blotting

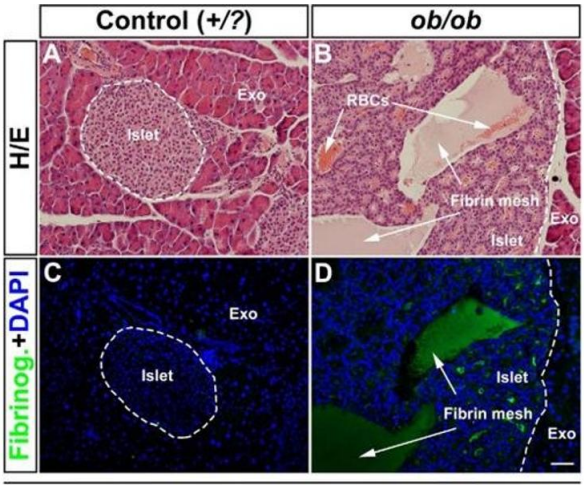
Image 1. Western Blot of Anti-Fibronectin Antibody. Impact of OTA on cellular protein and mRNA amount in fibroblasts [NRK-49F]. OTA effect on fibronectin protein amount and mRNA abundance in NRK-49F under mono and co-culture conditions. Representative Western blots of proteins isolated from cells exposed to OTA. * indicates significant difference compared with the control group. Exposure of fibroblasts in monoculture to 10 or 100 nM OTA caused an

increase of fibronectin protein amount. Fig. 4. PMID: 31415839.



Fluorescence Microscopy

Image 2. Immunofluorescence of Anti-Fibronectin Antibody. Representative images of isolated EC cultured on various MA-coated surfaces after 24 h exposure to 0.5 dyn/cm2 immunofluorescence-labelled for Fibronectin. A strong rearrangement of the initial Fibronectin layer into coarse fibrils (under venous shear stress) (Fig. 3I) with severe displacements of Fibronectin occurred on PPMA-p. Only slight Fibronectin reorganization into fine fibrils (PPMA-c Fig. 3J) or no Fibronectin reorganization at all (POMA-p and POMA-c Fig. 3K and L) were observed as expected from the higher Fibronectin anchorage strength to these latter substrates in comparison to PPMA-p. These findings are in line with earlier results at static cell culture conditions of isolated EC [4e6] showing the dependence of adhesion and stress fibre patterns on the matrix anchorage to the polymer surface, which were now attenuated by the application of shear stress. Scale bar: 10 mm. Fig. 3. PMID: 22154622.



Fluorescence Microscopy

Image 3. Immunohistochemistry of Anti-Fibronectin Antibody. Immunohistochemical assessment of proteins involved in blood coagulation in ob/ob pancreas. (A,B) Hematoxylin/Eosin staining of an islet from a lean control (A) and a ob/ob (B) pancreas at 52 weeks. Note the accumulation of RBCs (white arrows in (B). (C,D) Consecutive sections to (A,B) stained for Fibrinogen (green) and DAPI (Blue) indicating the presence of a fibrin mesh within the areas of the lesions (white arrows in (D) compare with (B)). Scale bar in (D) is 50µm. Figure 6. PMID: 27713548.

Please check the product details page for more images. Overall 5 images are available for ABIN5596761.