Fibronectin (cellular) (human) monoclonal antibody (DH1)

Fibronectins are high molecular weight, disulphide-linked, dimeric cell adhesion glycoproteins found in basement membranes and in the interstitial connective tissue matrix. A single fibronectin gene is subject to alternative splicing in a cell-type-, development- and age-regulated manner which gives rise to multiple molecular forms. In addition to their prominent role in adhesion, fibronectins have been reported to mediate various aspects of cellular interaction, including migration during development and wound-healing, haemostasis, and the regulation of cell growth and differentiation. Cellular fibronectins (cFn) are found in low amounts in normal human plasma and tissues, but they are abundant in the plasma of carcinoma patients and in the stroma of various carcinomas. In contrast, a soluble form of fibronectin produced by hepatocytes is readily detectable in plasma and becomes deposited in pericellular matrices and within tissues. This form of fibronectin, referred to as ‘plasma fibronectin’ (pFn), differs from cFn by the absence of an amino acid sequence, known as extra domain A1.

This antibody is covered by our Worry-Free Guarantee.

Citations: 5 View Online »

Ordering Information

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BML-FG6010-0100	100µl

Manuals, SDS & CofA

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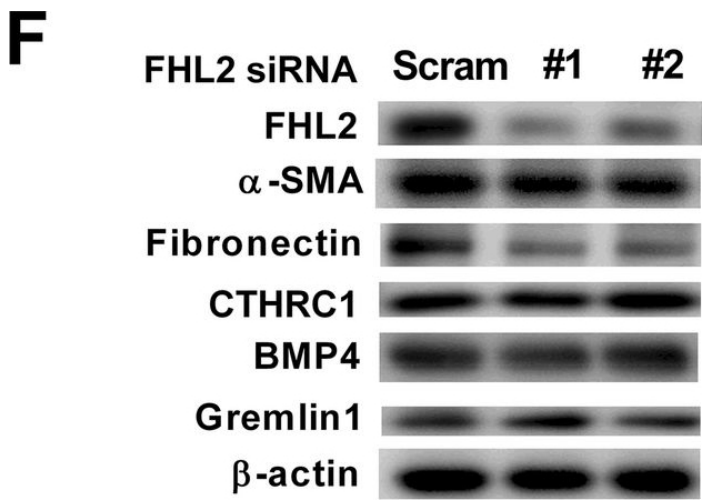
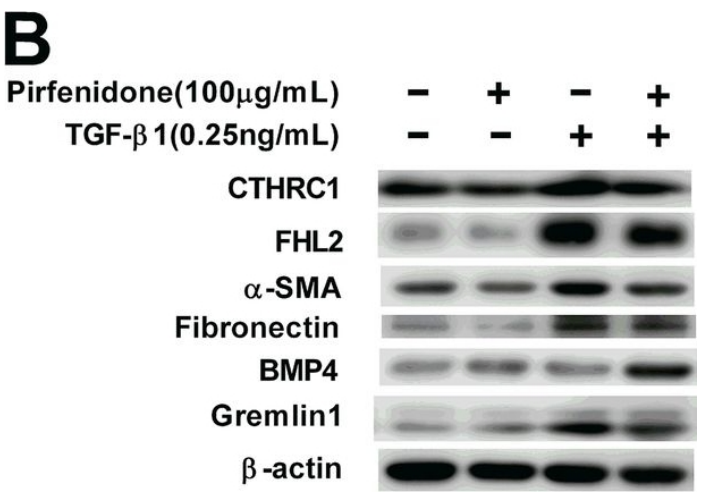
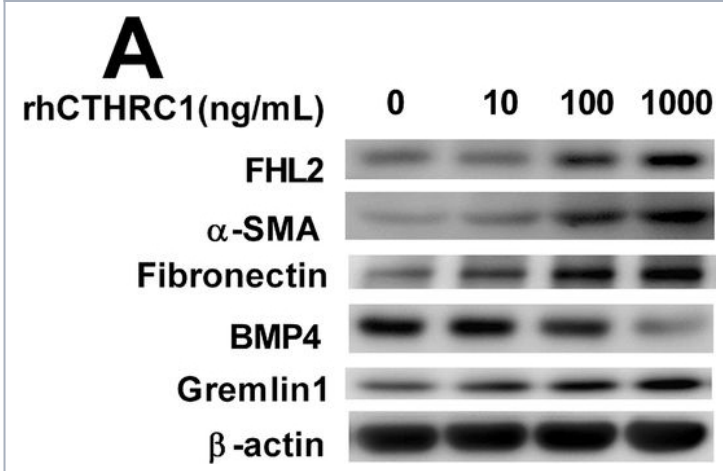


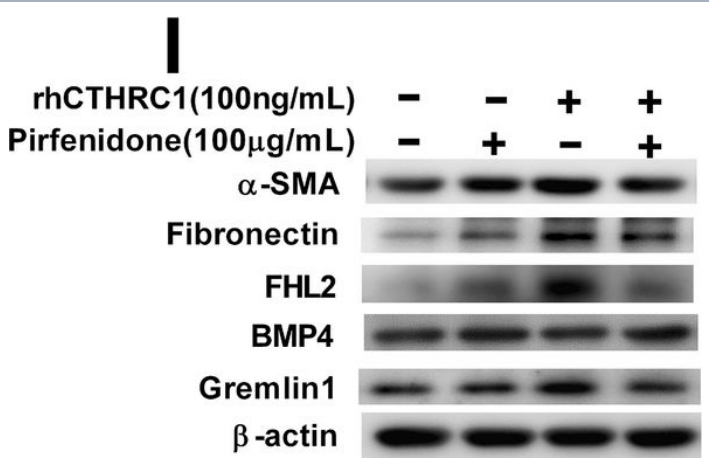
Effects of CTHRC1 and FHL2 knockdown in HFL-1 cells. Collagen gel contraction and chemotaxis were assessed in CTHRC1- and FHL2-knocked down HFL-1 cells. Western blot analysis of the effects of CTHRC1 silencing on targets related to fibrotic processes (a). Collagen gel contraction (b) and chemotaxis (c) after silencing of CTHRC1. The effect of CTHRC1 knockdown on TGF-β1 (0.25 ng/mL)-induced gel contraction (d) and chemotaxis toward to fibronectin (e). Western blot analysis to analyze the effects of FHL2 silencing on targets related to fibrotic processes (f). Collagen gel contraction and (g) chemotaxis (h) after silencing of FHL2. Collagen gel contraction, vertical axis: gel size measured after 2 days of contraction expressed as a percentage of the initial value. Chemotaxis, vertical axis: number of migrated cells per 5 HPF. Horizontal axis: conditions. Values represent means ± SEMs of three separate experiments. *P < 0.05, **P < 0.01, ***P < 0.001



Effects of pirfenidone on TGF-β1-mediated fibrotic regulators in lung fibroblasts. Subconfluent HFL-1 cells were cultured in SF-DMEM for 24 h and then incubated in the presence or absence of TGF-β1 (0.25 ng/mL) and pirfenidone (100 ng/mL). (a) CTHRC1 and FHL2 expression in HFL-1 cells was determined using fluorescence-immunohistochemistry with primary antibodies against CTHRC1 or FHL2, followed by incubation with secondary antibodies labeled with Alexa Fluor 488 goat anti-rabbit IgG (green). The scale bar indicates 50 μm. (b) Western blot analysis to determine the effects of pirfenidone on targets related to TGF-β1-mediated fibrotic processes, including CTHRC1 (30 kDa), FHL2 (30 kDa), α-SMA (42 kDa), fibronectin (250 kDa), BMP4 (47 kDa), Gremlin1 (25 kDa), and β-actin (42 kDa). The vertical axis shows the relative intensities of (c) CTHRC1, (d) FHL2, (e) α-SMA, (f) fibronectin, (g) BMP4, and (h) Gremlin1 versus β-actin; the horizontal axis shows the conditions. Values represent means ± SEMs of three to five separate experiments. *P < 0.05, **P < 0.01, ***P < 0.001



Effects of pirfenidone on CTHRC1-mediated regulation in lung fibroblasts. Subconfluent HFL-1 cells were cultured in SF-DMEM for 24 h and then incubated in the presence or absence of different concentrations of rhCTHRC1. Western blot analysis of the effects of different concentrations of rhCTHRC1 on targets related to fibrotic processes (a). Effects of different concentrations of rhCTHRC1 on HFL-1 cell-mediated collagen gel contraction (b) and chemotaxis (c). Effects of different concentrations of rhCTHRC1-mediated targets assayed using western blot analysis (d-h). The vertical axis shows the relative intensities of FHL2 (D), α-SMA (e), fibronectin (f), BMP4 (g), Gremlin1 (h) versus β-actin; the horizontal axis shows the conditions. Subconfluent HFL-1 cells were cultured in SF-DMEM for 24 h and then incubated in the presence or absence of rhCTHRC1 (100 ng/mL) and pirfenidone (100 ng/mL) for 48 h. Western blot analysis to analyze the effects of pirfenidone on rhCTHRC1-mediated targets related to fibrotic processes (i). Effects of pirfenidone on rhCTHRC1-mediated collagen gel contraction (j) and chemotaxis (k). Effects of pirfenidone on the expression levels of rhCTHRC1-mediated targets assayed using western blot analysis (l-p). The vertical axis shows the relative intensities of α-SMA (l), fibronectin (m), FHL2 (n), BMP4 (o), Gremlin1 (p) versus β-actin; the horizontal axis shows the conditions. Collagen gel contraction, vertical axis: gel size measured after 2 days of contraction expressed as a percentage of the initial value. Chemotaxis, vertical axis: number of migrated cells per 5 HPF. Horizontal axis: conditions. Values represent means ± SEMs of three to five separate experiments. *P < 0.05, **P < 0.01, ***P < 0.001



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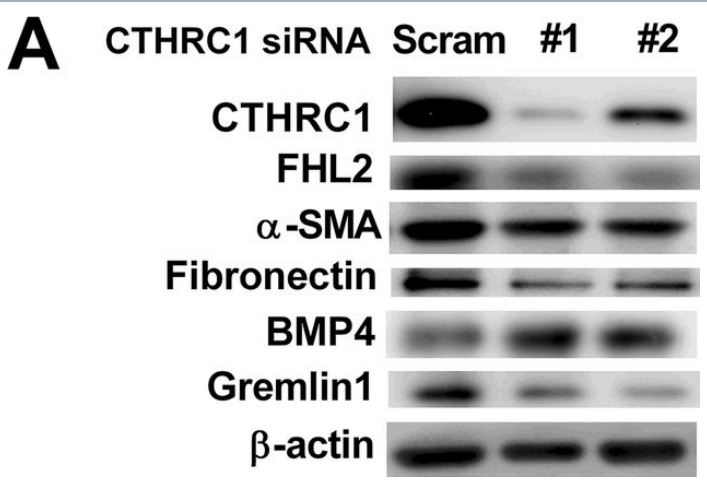

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Handling & Storage

Long Term Storage	-20°C
Shipping	Blue Ice

Regulatory Status

RUO - Research Use Only

Product Details

Alternative Name	cFn
Application	ICC, WB
Application Notes	Detects a band of ~ 250kDa by Western blot.
Clone	DH1
Formulation	Liquid. In PBS containing 0.1% sodium azide and 1mg/mL BSA.
Host	Mouse
Immunogen	Purified fibronectin from A8387 fibrosarcoma cells.
Isotype	IgG1
Purity Detail	Protein A affinity chromatography.
Species Reactivity	Human
Specificity	Recognizes the extra domain A (ED) of cellular fibronectin (cFn). Recognizes cFN in malignant tumors, does not cross-react with benign tumors or normal tissues.
UniProt ID	P02751
Worry-free Guarantee	**This antibody is covered by our Worry-Free Guarantee .**

Last modified: May 29, 2024

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