

Fibronectin (P1H11): sc-18825

BACKGROUND

Fibronectin is an extracellular matrix glycoprotein present on most cell surfaces, in extracellular fluids and in plasma. A high molecular weight heterodimeric protein, it was originally discovered as a protein missing from the surfaces of virus-transformed cells, and it has been shown to be involved in various functions including cell adhesion, cell motility and wound healing. Alternative splicing and glycosylation give rise to several different forms of Fibronectin, some of which exhibit restricted tissue distribution or association with malignancies. It has been shown that myofibroblast phenotype formation correlates with the occurrence of glycosylated Fibronectin and Fibronectin splice variants in Dupuytren's disease.

CHROMOSOMAL LOCATION

Genetic locus: FN1 (human) mapping to 2q35; Fn1 (mouse) mapping to 1 C3.

SOURCE

Fibronectin (P1H11) is a mouse monoclonal antibody raised against a cell binding domain of fibronectin of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available azide-free for biological studies, sc-18825 L, 200 µg/0.1 ml.

Fibronectin (P1H11) is available conjugated to agarose (sc-18825 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-18825 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-18825 PE), fluorescein (sc-18825 FITC), Alexa Fluor[®] 488 (sc-18825 AF488), Alexa Fluor[®] 546 (sc-18825 AF546), Alexa Fluor[®] 594 (sc-18825 AF594) or Alexa Fluor[®] 647 (sc-18825 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-18825 AF680) or Alexa Fluor[®] 790 (sc-18825 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor[®] is a trademark of Molecular Probes, Inc., Oregon, USA

APPLICATIONS

Fibronectin (P1H11) is recommended for detection of 38 kDa and 190 kDa precursor from the A chain of Fibronectin of mouse, rat, human and primate origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for Fibronectin siRNA (h): sc-29315, Fibronectin siRNA (m): sc-35371, Fibronectin shRNA Plasmid (h): sc-29315-SH, Fibronectin shRNA Plasmid (m): sc-35371-SH, Fibronectin shRNA (h) Lentiviral Particles: sc-29315-V and Fibronectin shRNA (m) Lentiviral Particles: sc-35371-V.

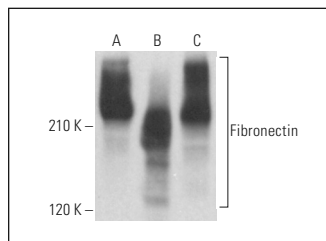
Molecular Weight of Fibronectin: 220 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, A-10 cell lysate: sc-3806 or XP12RO whole cell lysate: sc-364364.

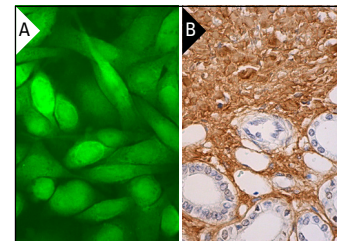
STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



Fibronectin (P1H11): sc-18825. Western blot analysis of Fibronectin expression in Hep G2 (A), XP12RO (B) and A-10 (C) whole cell lysates.



Fibronectin (P1H11) Alexa Fluor[®] 488: sc-18825 AF488. Direct immunofluorescence staining of formalin-fixed SW480 cells showing membrane localization. Blocked with UltraCruz[®] Blocking Reagent: sc-516214 (A). Fibronectin (P1H11): sc-18825. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing staining of extracellular matrix (B).

SELECT PRODUCT CITATIONS

- Qu, X.H., et al. 2005. Enhanced vascular-related cellular affinity on surface modified copolyesters of 3-hydroxybutyrate and 3-hydroxyhexanoate (PHBHHx). *Biomaterials* 26: 6991-7001.
- Wang, Y., et al. 2011. Inhibition of latrunculin-A on dexamethasone-induced fibronectin production in cultured human trabecular meshwork cells. *Int. J. Ophthalmol.* 4: 239-242.
- Chen, S.F., et al. 2012. Nonadhesive culture system as a model of rapid sphere formation with cancer stem cell properties. *PLoS ONE* 7: e31864.
- Guo, L., et al. 2013. Stat3-coordinated Lin-28-let-7-HMGA2 and miR-200-ZEB1 circuits initiate and maintain oncostatin M-driven epithelial-mesenchymal transition. *Oncogene* 32: 5272-5282.
- Ndisang, J.F., et al. 2014. 1 Hemin therapy improves kidney function in male streptozotocin-induced diabetic rats: role of the heme oxygenase/atrial natriuretic peptide/adiponectin axis. *Endocrinology* 155: 215-229.
- Ou-Yang, L., et al. 2015. Forkhead box C1 induces epithelial-mesenchymal transition and is a potential therapeutic target in nasopharyngeal carcinoma. *Mol. Med. Rep.* 12: 8003-8009.
- Li, X., et al. 2016. Effects of latanoprost and bimatoprost on the expression of molecules relevant to ocular inflow and outflow pathways. *PLoS ONE* 11: e0151644.
- Aksoy, M.O., et al. 2017. Secretion of the endoplasmic reticulum stress protein, GRP78, into the BALF is increased in cigarette smokers. *Respir. Res.* 18: 78.
- Zhao, L., et al. 2018. Function of GCN5 in the TGF-β1-induced epithelial-to-mesenchymal transition in breast cancer. *Oncol. Lett.* 16: 3955-3963.

RESEARCH USE

For research use only, not for use in diagnostic procedures.