SANTA CRUZ BIOTECHNOLOGY, INC.

Fibronectin (P1F11): sc-18826

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.

REFERENCES

1. Akiyama,S.K., et al. 1981.The structure of Fibronectin and its role in cellular adhesion. J. Supermol. Struct. Cell. Biochem. 16: 345-348.
2. Ruoslahti, E., et al. 1982. Molecular and biological interactions of Fibronectin. J. Invest. Dermatol. 79: 65s-68s.
3. Keen, J., et al. 1984. Monoclonal antibodies that distinguish between human cellular and plasma Fibronectin. Mol. Biol. Med. 2: 15-27.

CHROMOSOMAL LOCATION

Genetic locus: FN1 (human) mapping to 2q35.

SOURCE

Fibronectin (P1F11) is a mouse monoclonal antibody raised against CS-1 peptide of Fibronectin of human origin.

PRODUCT

Each vial contains 200 µg IgM 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-18826 L, 200 µg/0.1 ml.

STORAGE

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

APPLICATIONS

Fibronectin (P1F11) is recommended for detection of CS-1 forms of Fibronectin of human 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)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

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

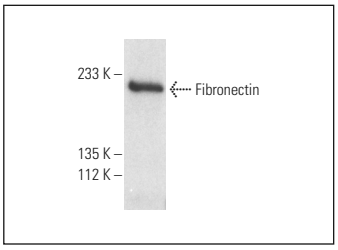
Molecular Weight of Fibronectin: 220 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, CCD-1064Sk cell lysate: sc-2263 or U-87 MG cell lysate: sc-2411.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Fibronectin (P1F11): sc-18826. Western blot analysis of Fibronectin expression in CCD-1064Sk whole cell lysate.

SELECT PRODUCT CITATIONS

1. Ubogu, E.E., et al. 2006. Determinants of CCL5-driven mononuclear cell migration across the blood-brain barrier. Implications for therapeutically modulating neuroinflammation. J. Neuroimmunol. 179: 132-144.
2. Muzzio, M.L., et al. 2007. Circulating small dense LDL, endothelial injuring factors and Fibronectin in healthy postmenopausal women. Clin. Chim. Acta 381: 157-163.
3. Man, S., et al. 2009. α4 Integrin/FN-CS1 mediated leukocyte adhesion to brain microvascular endothelial cells under flow conditions. J. Neuroimmunol. 210: 92-99.
4. Pankov, R. and Momchilova, A. 2009. Fluorescent labeling techniques for investigation of Fibronectin fibrillogenesis (labeling fibronectin fibrillogenesis). Methods Mol. Biol. 522: 261-274.
5. Plotnik, D., et al. 2017. Extracellular matrix proteins mediate HIV-1 gp120 interactions with $\alpha_4\beta_7$. J. Virol. 91: e01005-17.
6. Liu, C.Y. and Wang, H.C. 2019. The fibroblast of radicular cyst facilitate osteoclastogenesis via the autocrine of Fibronectin containing extra domain A. Oral Dis. 25: 1136-1146.

RESEARCH USE

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