

Fibronectin (TV-1): sc-69682

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 (TV-1) is a mouse monoclonal antibody raised against a T cell leukemia biopsy 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.

APPLICATIONS

Fibronectin (TV-1) is recommended for detection of Fibronectin of mouse, rat and 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)], 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, CCD-1064Sk cell lysate: sc-2263 or human platelet extract: sc-363773.

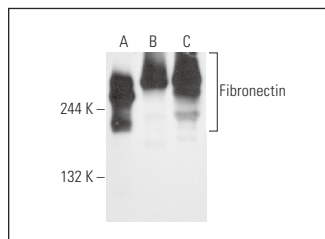
RECOMMENDED SUPPORT REAGENTS

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 A/G PLUS-Agarose: sc-2003 (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. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

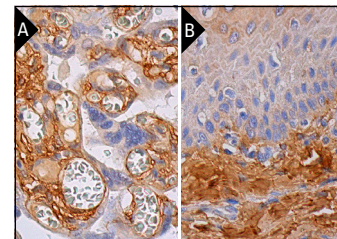
STORAGE

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

DATA



Fibronectin (TV-1): sc-69682. Western blot analysis of Fibronectin expression in Hep G2 (A), CCD-1064Sk (B) whole cell lysates and human platelet extract (C).



Fibronectin (TV-1): sc-69682. Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing staining of extracellular matrix (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human esophagus tissue showing staining of extracellular matrix and cytoplasmic staining of squamous epithelial cells (B).

SELECT PRODUCT CITATIONS

- Atay, S., et al. 2011. Morphologic and proteomic characterization of exosomes released by cultured extravillous trophoblast cells. *Exp. Cell Res.* 317: 1192-1202.
- Köhn-Luque, A., et al. 2013. Dynamics of VEGF matrix-retention in vascular network patterning. *Phys. Biol.* 10: 066007.
- Song, K., et al. 2014. Hydrogen sulfide inhibits the renal fibrosis of obstructive nephropathy. *Kidney Int.* 85: 1318-1329.
- Amador-Martínez, I., et al. 2019. Reduced endothelial nitric oxide synthase activation contributes to cardiovascular injury during chronic kidney disease progression. *Am. J. Physiol. Renal Physiol.* 317: F275-F285.
- Ando, A., et al. 2019. Repressive role of stabilized hypoxia inducible factor 1α expression on transforming growth factor β-induced extracellular matrix production in lung cancer cells. *Cancer Sci.* 110: 1959-1973.
- Amador-Martínez, I., et al. 2021. Early inflammatory changes and CC chemokine ligand-8 upregulation in the heart contribute to uremic cardiomyopathy. *FASEB J.* 35: e21761.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.



See **Fibronectin (EP5): sc-8422** for Fibronectin antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.