

# Fibronectin (N-20): sc-6953

## 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.

## CHROMOSOMAL LOCATION

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

## SOURCE

Fibronectin (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Fibronectin of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-6953 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Fibronectin (N-20) 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)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500). Fibronectin (N-20) is also recommended for detection of Fibronectin in additional species, including bovine.

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 whole cell lysate: sc-363773.

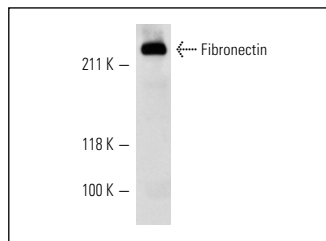
## RESEARCH USE

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

## STORAGE

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

## DATA



Fibronectin (N-20): sc-6953. Western blot analysis of Fibronectin expression in human platelet whole cell lysate.

## SELECT PRODUCT CITATIONS

1. Zheng, F., et al. 1999. Uteroglobin is essential in preventing immunoglobulin A nephropathy in mice. *Nat. Med.* 5: 1018-1025.
2. Lakhtakia, R., et al. 2003. Hepatocellular carcinoma in a hepatitis B 'x' transgenic mouse model: a sequential pathological evaluation. *J. Gastroenterol. Hepatol.* 18: 80-91.
3. Koli, K., et al. 2004. Disruption of LTBP-4 function reduces TGFβ activation and enhances BMP-4 signaling in the lung. *J. Cell Biol.* 167: 123-133.
4. Sancho, M., et al. 2006. Expression and function of the chemokine receptor CCR7 in thyroid carcinomas. *J. Endocrinol.* 191: 229-238.
5. Sume, S.S., et al. 2010. Epithelial to mesenchymal transition in gingival overgrowth. *Am. J. Pathol.* 177: 208-218.
6. Baarsma, H.A., et al. 2011. β-Catenin signaling is required for TGF-β1-induced extracellular matrix production by airway smooth muscle cells. *Am. J. Physiol. Lung Cell. Mol. Physiol.* 301: L956-L965.
7. Liu, H., et al. 2012. Hepatitis B virus X protein promotes hepatoma cell invasion and metastasis by stabilizing Snail protein. *Cancer Sci.* 103: 2072-2081.
8. Shimizu, F., et al. 2013. Advanced glycation end-products disrupt the blood-brain barrier by stimulating the release of transforming growth factor-β by pericytes and vascular endothelial growth factor and matrix metalloproteinase-2 by endothelial cells *in vitro*. *Neurobiol. Aging* 34: 1902-1912.
9. Früh, S.M., et al. 2015. Molecular architecture of native Fibronectin fibrils. *Nat. Commun.* 6: 7275.



Try **Fibronectin (EP5): sc-8422** or **Fibronectin (A-11): sc-271098**, our highly recommended monoclonal alternatives to Fibronectin (N-20). Also, for AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647 conjugates, see **Fibronectin (EP5): sc-8422**.