SANTA CRUZ BIOTECHNOLOGY, INC.

Fibronectin (568): sc-52331

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 (568) is a mouse monoclonal antibody raised against isolated cultured fibroblasts of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Fibronectin (568) is available conjugated to agarose (sc-52331 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-52331 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-52331 PE), fluorescein (sc-52331 FITC), Alexa Fluor® 488 (sc-52331 AF488), Alexa Fluor® 546 (sc-52331 AF546), Alexa Fluor® 594 (sc-52331 AF594) or Alexa Fluor® 647 (sc-52331 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-52331 AF680) or Alexa Fluor® 790 (sc-52331 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

Fibronectin (568) is recommended for detection of Fibronectin of mouse, rat and human origin by Western Blotting (starting dilution to be determined by researcher, dilution range 1:10-1:200), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution to be determined by researcher, dilution range 1:10-1:200) and immunohistochemistry (including paraffin-embedded sections) (starting dilution to be determined by researcher, dilution range 1:10-1:200).

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.

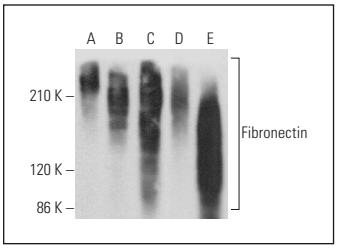
Molecular Weight of Fibronectin: 220 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, U-87 MG cell lysate: sc-2411 or XP12RO whole cell lysate: sc-364364.

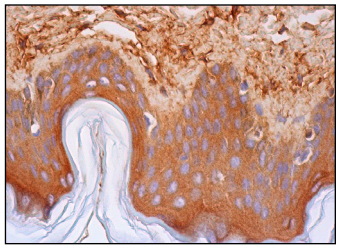
STORAGE

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

DATA



Fibronectin (568): sc-52331. Western blot analysis of Fibronectin expression in Hep G2 (**A**), XP12RO (**B**), U-87 MG (**C**), T24 (**D**) and RT-4 (**E**) whole cell lysates.



Fibronectin (568): sc-52331. Immunoperoxidase staining of formalin fixed, paraffin-embedded human skin tissue showing staining of dermal connective tissue and cytoplasmic staining of epidermal cells.

SELECT PRODUCT CITATIONS

1. Huang, Y., et al. 2008. Midkine induces epithelial-mesenchymal transition through Notch2/Jak2-Stat3 signaling in human keratinocytes. Cell Cycle 7: 1613-1622.
2. Lee, W.J., et al. 2011. Adenovirus-relaxin gene therapy for keloids: implication for reversing pathological fibrosis. Br. J. Dermatol. 165: 673-677.
3. Lee, W.J., et al. 2013. A novel three-dimensional model system for keloid study: organotypic multicellular scar model. Wound Repair Regen. 21: 155-165.
4. Fernandez-Garcia, B., et al. 2014. Expression and prognostic significance of fibronectin and matrix metalloproteases in breast cancer metastasis. Histopathology 64: 512-522.
5. Li, D., et al. 2015. Procyanidin B2 inhibits high glucose-induced epithelial-mesenchymal transition in HK-2 human renal proximal tubular epithelial cells. Mol. Med. Rep. 12: 8148-8154.
6. Sato, N., et al. 2016. Proteomic analysis of human tendon and ligament: solubilization and analysis of insoluble extracellular matrix in connective tissues. J. Proteome Res. 15: 4709-4721.
7. Chen, Y., et al. 2017. Endogenous Nampt upregulation is associated with diabetic nephropathy inflammatory-fibrosis through the NFκB p65 and Sirt1 pathway; NMN alleviates diabetic nephropathy inflammatory-fibrosis by inhibiting endogenous Nampt. Exp. Ther. Med. 14: 4181-4193.
8. Cui, Y.H., et al. 2018. FBXL14 abolishes breast cancer progression by targeting CDCP1 for proteasomal degradation. Oncogene 37: 5794-5809.
9. Garg, S., et al. 2019. Marine carotenoid fucoxanthin possesses anti-metastasis activity: molecular evidence. Mar. Drugs 17: 338.

RESEARCH USE

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