

Product datasheet for TA336854

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Fibronectin (FN1) Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: ICC/IF, IHC, Simple Western, WB

Recommended Dilution: Immunohistochemistry-Frozen, Immunocytochemistry/ Immunofluorescence: 1:400, Western

Blot: 1:1000, Immunohistochemistry-Paraffin: 1:400, Simple Western: 1:100,

Immunohistochemistry: 1:400

Reactivity: Human, Mouse

Host: Rabbit

Clonality: Polyclonal

Immunogen: A synthetic peptide made toward the C-terminal region of the human Fibronectin protein

(within residues 2250-2300). [Swiss-Prot P02751]

Formulation: PBS with 30% Glycerol, 0.05% Sodium Azide. Store at 4C short term. Aliquot and store at -20C

long term. Avoid freeze-thaw cycles.

Concentration: lot specific

Purification: Affinity purified
Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Gene Name: fibronectin 1

Database Link: NP 997639

Entrez Gene 14268 MouseEntrez Gene 2335 Human

P02751





Background:

Fibronectin EDA (FN-EDA, FN, fibronectin 1) is a glycoprotein that is involved in cell adhesion as well as cell migration processes such as embryogenesis, wound healing, host defense and metastasis. Fibronectin appears to be an important factor in the ability of cancerous cells to metastasize by inducing matrix metalloproteinases (MMPs). In a study of human laryngeal carcinoma cells, researchers showed that FN-induced expression of MMP-9 increased the DNA binding activity of transcription factors NF-kappa-B, Activator protein-1 and Specificity protein-1 to the promoter region (PMID: 20638438). Additionally, a study of renal cell cancer showed that the mRNA expression of fibronectin 1 was higher in patients with renal cell cancer as compared to patients with healthy kidneys. This disparity in mRNA expression levels could potentially be used to determine the aggressiveness of renal cell cancer as well as indicate the progression of the disease in patients (PMID: 20860816). Furthermore, a knockdown study of endogenous FN in the A431-III cell line showed a significant decrease of the migratory and invasive activity of the cells as well as an inhibition of secreted MMP-9 (PMID: 21036738).

Synonyms: CIG; ED-B; FINC; FN; FNZ; GFND; GFND2; LETS; MSF

Note: This Fibronectin antibody is useful for Immunocytochemistry/Immunofluorescence, Western

Blot, and IHC-paraffin embedded sections. In ICC/IF, cytoplasmic staining was observed in HeLa cells. In Western Blot, a band is seen ~262 kDa representing Fibronectin. In IHC-P, staining was observed in the cytoplasm and extracellular space of mouse prostate tissue. Prior to immunostaining paraffin tissues, antigen retrieval with sodium citrate buffer (pH 6.0)

is recommended.

Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Secreted Protein

Protein Pathways: ECM-receptor interaction, Focal adhesion, Pathways in cancer, Regulation of actin

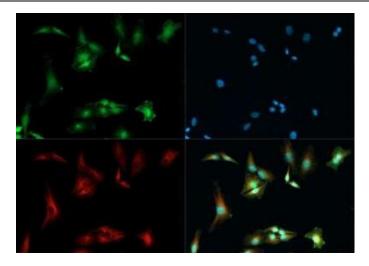
cytoskeleton, Small cell lung cancer

Product images:

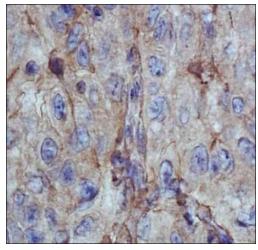


Simple Western: Fibronectin Antibody - BSA Free TA336854 - Lane view shows a specific band for Fibronectin in 0.5 mg/ml of HepG2 lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.

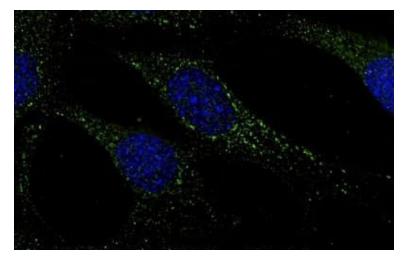




Immunocytochemistry/Immunofluorescence: Fibronectin Antibody - BSA Free TA336854 - Fibronectin antibody was tested in HeLa cells with DyLight 488 (Green). Nuclei and alphatubulin were counterstained with DAPI (Blue) and DyLight 550 (Red).

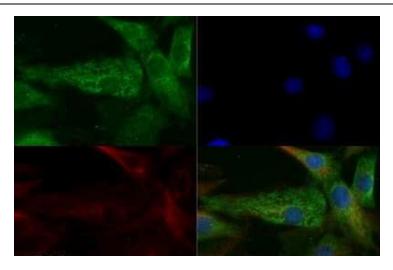


Immunohistochemistry: Fibronectin Antibody - BSA Free TA336854 - Analysis of Fibronectin in human renal cancer using DAB with hematoxylin counterstain.

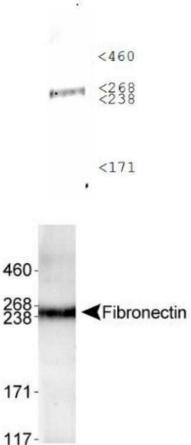


Immunocytochemistry/Immunofluorescence: Fibronectin Antibody - BSA Free TA336854 - NIH3T3 cells were fixed in 4% paraformaldehyde for 10 minutes and permeabilized in 0.05% Triton X-100 in PBS for 5 minutes. The cells were incubated with anti- TA336854 at 1 ug/ml overnight at 4C and detected with an anti-rabbit Dylight 488 (Green) at a 1:1000 dilution for 60 minutes. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 100X objective and digitally deconvolved.





Immunocytochemistry/Immunofluorescence: Fibronectin Antibody - BSA Free TA336854 - NIH-3T3 cells were fixed for 10 minutes using 10% formalin and then permeabilized for 5 minutes using 1X TBS + 0.5% Triton X-100. The cells were incubated with anti-Fibronectin at 2 ug/mL overnight at 4C and detected with an anti-rabbit DyLight 488 (Green) at 1:500. Alpha tubulin (DM1A) NB100-690 was used as a co-stain at 1:1000 and detected with an anti-mouse DyLight 550 (Red) at a 1:500 dilution. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 40X objective.



Western Blot: Fibronectin Antibody - BSA Free TA336854 - Analysis of Fibronectin in HepG2 cell lysate.

Western Blot: Fibronectin Antibody - BSA Free TA336854 - Analysis of Fibronectin in NIH 3T3 cell lysate.