SANTA CRUZ BIOTECHNOLOGY, INC.

Fascin 1 (C-19): sc-16579

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Cell adhesion to extracellular matrix is an important physiological stimulus for organization of the Actin-based cytoskeleton. Adhesion to the matrix glycoprotein Thrombospondin-1 triggers the sustained formation of F-Actin microspikes that contain the Actin-bundling protein Fascin. These structures are also implicated in cell migration, which may be an important function of Thrombospondin-1 in tissue remodelling and wound repair. Fascin bundles Actin microfilaments within dynamic cellular structures such as microspikes, stress fibers and membrane ruffles. Fascin could serve as a prognostic factor for abnormal ovarian epithelial pathology and could be a novel target for the treatment of ovarian cancer. Fascin, an Actin-bundling protein, identifies dendritic cells in the blood and in tissues.

REFERENCES

1. Jaffe, R., DeVaughn, D. and Langhoff, E. 1998. Fascin and the differential diagnosis of childhood histiocytic lesions. Pediatr. Dev. Pathol. 1: 216-221.
2. Adams, J.C. and Schwartz, M.A. 2000. Stimulation of Fascin spikes by Thrombospondin-1 is mediated by the GTPases Rac and Cdc42. J. Cell Biol. 150: 807-822.
3. Tubb, B.E., Bardien-Kruger, S., Kashork, C.D., Shaffer, L.G., Ramagli, L.S., Xu, J., Siciliano, M.J. and Bryan, J. 2000. Characterization of human retinal Fascin gene (FSCN2) at 17q25: close physical linkage of Fascin and cytoplasmic Actin genes. Genomics 65: 146-156.
4. Hu, W., McCrea, P.D., Deavers, M., Kavanagh, J.J., Kudelka, A.P. and Verschraegen, C.F. 2000. Increased expression of Fascin, motility associated protein, in cell cultures derived from ovarian cancer and in borderline and carcinomatous ovarian tumors. Clin. Exp. Metastasis 18: 83-88.
5. Grothey, A., Hashizume, R., Sahin, A.A. and McCrea, P.D. 2000. Fascin, an Actin-bundling protein associated with cell motility, is upregulated in hormone receptor negative breast cancer. Br. J. Cancer 83: 870-873.

CHROMOSOMAL LOCATION

Genetic locus: FSCN1 (human) mapping to 7p22.1; Fscn1 (mouse) mapping to 5 G2.

SOURCE

Fascin 1 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Fascin 1 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-16579 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Fascin 1 (C-19) is recommended for detection of Fascin 1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Fascin 1 siRNA (h): sc-35359, Fascin 1 siRNA (m): sc-35360, Fascin 1 shRNA Plasmid (h): sc-35359-SH, Fascin 1 shRNA Plasmid (m): sc-35360-SH, Fascin 1 shRNA (h) Lentiviral Particles: sc-35359-V and Fascin 1 shRNA (m) Lentiviral Particles: sc-35360-V.

Molecular Weight of Fascin 1: 55 kDa.

Positive Controls: MES-SA/Dx5 cell lysate: sc-2284, HeLa whole cell lysate: sc-2200 or U-87 MG cell lysate: sc-2411.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

SELECT PRODUCT CITATIONS

1. Ostapkowicz, A., Inai, K., Smith, L., Kreda, S. and Spychala, J. 2006. Lipid rafts remodeling in estrogen receptor-negative breast cancer is reversed by histone deacetylase inhibitor. Mol. Cancer Ther. 5: 238-245.

RESEARCH USE

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

PROTOCOLS

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