

Fascin 1 (55K-2): sc-21743

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.

CHROMOSOMAL LOCATION

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

SOURCE

Fascin 1 (55K-2) is a mouse monoclonal antibody raised against Fascin 1 purified from HeLa cells 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.

Fascin 1 (55K-2) is available conjugated to agarose (sc-21743 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-21743 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-21743 PE), fluorescein (sc-21743 FITC), Alexa Fluor® 488 (sc-21743 AF488), Alexa Fluor® 546 (sc-21743 AF546), Alexa Fluor® 594 (sc-21743 AF594) or Alexa Fluor® 647 (sc-21743 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-21743 AF680) or Alexa Fluor® 790 (sc-21743 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

Fascin 1 (55K-2) 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), 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 Fascin 1 siRNA (h): sc-35359, Fascin 1 siRNA (m): sc-35360, Fascin 1 siRNA (r): sc-270625, Fascin 1 shRNA Plasmid (h): sc-35359-SH, Fascin 1 shRNA Plasmid (m): sc-35360-SH, Fascin 1 shRNA Plasmid (r): sc-270625-SH, Fascin 1 shRNA (h) Lentiviral Particles: sc-35359-V, Fascin 1 shRNA (m) Lentiviral Particles: sc-35360-V and Fascin 1 shRNA (r) Lentiviral Particles: sc-270625-V.

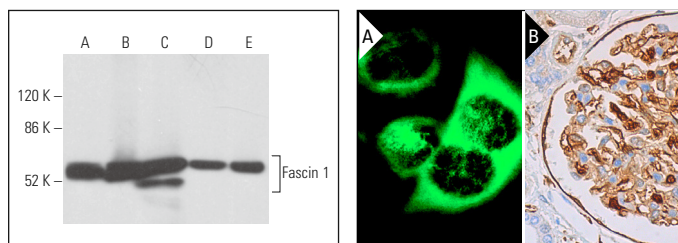
Molecular Weight of Fascin 1: 55 kDa.

Positive Controls: IMR-32 cell lysate: sc-2409, SH-SY5Y cell lysate: sc-3812 or H4 cell lysate: sc-2408.

STORAGE

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

DATA



Fascin 1 (55K-2): sc-21743. Western blot analysis of Fascin 1 expression in SH-SY5Y (A), IMR-32 (B), H4 (C), EOC 20 (D) and Neuro-2A (E) whole cell lysates.

Fascin 1 (55K-2): sc-21743. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic staining (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing cytoplasmic and membrane staining of cells in glomeruli and endothelial cells (B).

SELECT PRODUCT CITATIONS

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- Liu, Y.Z., et al. 2014. A panel of protein markers for the early detection of lung cancer with bronchial brushing specimens. *Cancer Cytopathol.* 122: 833-841.
- Wang, X., et al. 2015. Inhibition of leucine aminopeptidase 3 suppresses invasion of ovarian cancer cells through down-regulation of Fascin and MMP-2/9. *Eur. J. Pharmacol.* 768: 116-122.
- Saad, A., et al. 2016. Insights into a novel nuclear function for Fascin in the regulation of the amino-acid transporter SLC3A2. *Sci. Rep.* 6: 36699.
- Kliewe, F., et al. 2017. Studying the role of Fascin 1 in mechanically stressed podocytes. *Sci. Rep.* 7: 9916.
- Wen, Q., et al. 2018. Actin nucleator Spire 1 is a regulator of ectoplasmic specialization in the testis. *Cell Death Dis.* 9: 208.
- Edens, B.M., et al. 2019. FMRP modulates neural differentiation through m⁶A-dependent mRNA nuclear export. *Cell Rep.* 28: 845-854.e5.
- Yang, H., et al. 2020. Inhibition of the proliferation, migration, and invasion of human breast cancer cells by leucine aminopeptidase 3 inhibitors derived from natural marine products. *Anticancer Drugs* 31: 60-66.
- Athanasios, T., et al. 2021. High Fascin 1 expression in colorectal cancer identifies patients at high risk for early disease recurrence and associated mortality. *BMC Cancer* 21: 153.
- Huang, H.W., et al. 2022. CMAHP promotes metastasis by reducing ubiquitination of Snail and inducing angiogenesis via GM-CSF overexpression in gastric cancer. *Oncogene* 41: 159-172.

RESEARCH USE

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