

Fascin 1 (D-10): sc-46675

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 (D-10) is a mouse monoclonal antibody raised against amino acids 384-493 of Fascin 1 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 (D-10) is available conjugated to agarose (sc-46675 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-46675 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-46675 PE), fluorescein (sc-46675 FITC), Alexa Fluor® 488 (sc-46675 AF488), Alexa Fluor® 546 (sc-46675 AF546), Alexa Fluor® 594 (sc-46675 AF594) or Alexa Fluor® 647 (sc-46675 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-46675 AF680) or Alexa Fluor® 790 (sc-46675 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

Fascin 1 (D-10) is recommended for detection of Fascin 1 of mouse, rat and human origin by Western Blotting (starting dilution 1:1000, dilution range 1:1000-1:10000), 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), immunohistochemistry (including paraffin-embedded sections) (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 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.

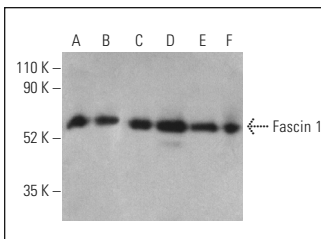
Molecular Weight of Fascin 1: 55 kDa.

Positive Controls: SH-SY5Y cell lysate: sc-3812, HeLa whole cell lysate: sc-2200 or Neuro-2A whole cell lysate: sc-364185.

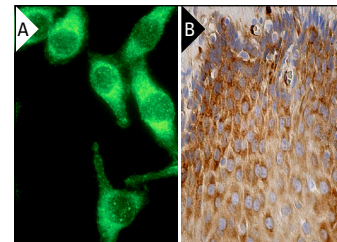
STORAGE

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

DATA



Fascin 1 (D-10) HRP: sc-46675 HRP. Direct western blot analysis of Fascin 1 expression in HeLa (A), SH-SY5Y (B), H4 (C), Neuro-2A (D), EOC 20 (E) and PANC-1 (F) whole cell lysates.



Fascin 1 (D-10): sc-46675. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization (A). Immunohistochemical staining of formalin fixed, paraffin-embedded human esophagus tissue showing cytoplasmic staining of squamous epithelial cells (B).

SELECT PRODUCT CITATIONS

- Garzón, B., et al. 2010. A biotinylated analog of the anti-proliferative prostaglandin A₁ allows assessment of PPAR-independent effects and identification of novel cellular targets for covalent modification. *Chem. Biol. Interact.* 183: 212-221.
- Proietti, S., et al. 2018. Increase in motility and invasiveness of MCF7 cancer cells induced by nicotine is abolished by melatonin through inhibition of ERK phosphorylation. *J. Pineal Res.* 64: e12467.
- Acharya, S., et al. 2019. Sphingosine-kinase-1 signaling promotes metastasis of triple-negative breast cancer. *Cancer Res.* 79: 4211-4226.
- Kim, M.J., et al. 2020. The inhibitory effect of curcumin via Fascin suppression through JAK/Stat3 pathway on metastasis and recurrence of ovary cancer cells. *BMC Womens Health* 20: 256.
- Wang, Y., et al. 2021. Fascin inhibitor increases intratumoral dendritic cell activation and anti-cancer immunity. *Cell Rep.* 35: 108948.
- Zhang, Z.D., et al. 2022. Akt serine/threonine kinase 2-mediated phosphorylation of fascin threonine 403 regulates esophageal cancer progression. *Int. J. Biochem. Cell Biol.* 145: 106188.
- Wang, T., et al. 2023. Identification of the novel role of sterol regulatory element binding proteins (SREBPs) in mechanotransduction and intraocular pressure regulation. *FASEB J.* 37: e23248.
- Barbonari, S., et al. 2024. Endolysosomal two-pore channel 2 plays opposing roles in primary and metastatic malignant melanoma cells. *Cell Biol. Int.* 48: 521-540.

RESEARCH USE

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

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