

AF-6 (B-5): sc-74433

BACKGROUND

The dynamics of a cell-cell interface such as tight junctions or adherens junctions are important in many developmental, physiological and pathological processes. AF-6 (MLLT4: myeloid/lymphoid or mixed-lineage leukemia translocated to 4) is a 1,612 amino acid protein that contains two N-terminal Ras binding domains (RBD) and a GLGF motif, and is implicated in Ras-mediated signaling events occurring at peripheral cell-cell junctions. AF-6 interacts with F-Actin and Profilin in cell-cell junctions, and may modulate Actin modeling near adhesion complexes. Furthermore, AF-6 coordinates junction adhesion molecule (JAM) recruitment to intercellular junctions through a PDZ domain. Developing mice deficient in AF-6 activity display a loss of neuro-epithelial polarity, suggesting that AF-6 activity is an important regulator of cell-cell junctions that influence apical/basolateral asymmetry.

CHROMOSOMAL LOCATION

Genetic locus: MLLT4 (human) mapping to 6q27; Mllt4 (mouse) mapping to 17 A1.

SOURCE

AF-6 (B-5) is a mouse monoclonal antibody raised against amino acids 5-110 of AF-6 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

AF-6 (B-5) is available conjugated to agarose (sc-74433 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-74433 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-74433 PE), fluorescein (sc-74433 FITC), Alexa Fluor® 488 (sc-74433 AF488), Alexa Fluor® 546 (sc-74433 AF546), Alexa Fluor® 594 (sc-74433 AF594) or Alexa Fluor® 647 (sc-74433 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-74433 AF680) or Alexa Fluor® 790 (sc-74433 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

AF-6 (B-5) is recommended for detection of AF-6 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), 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 AF-6 siRNA (h): sc-43007, AF-6 siRNA (m): sc-43008, AF-6 shRNA Plasmid (h): sc-43007-SH, AF-6 shRNA Plasmid (m): sc-43008-SH, AF-6 shRNA (h) Lentiviral Particles: sc-43007-V and AF-6 shRNA (m) Lentiviral Particles: sc-43008-V.

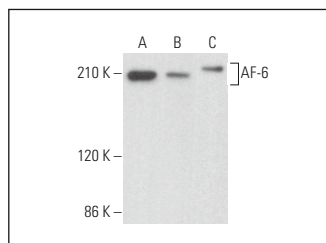
Molecular Weight of AF-6: 200 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, c4 whole cell lysate: sc-364186 or Daudi cell lysate: sc-2415.

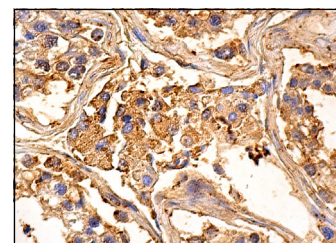
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



AF-6 (B-5): sc-74433. Western blot analysis of AF-6 expression in Hep G2 (A), c4 (B) and Daudi (C) whole cell lysates.



AF-6 (B-5): sc-74433. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing cytoplasmic staining of cells in seminiferous ducts and Leydig cells.

SELECT PRODUCT CITATIONS

- Awadia, S., et al. 2019. SGEF forms a complex with Scribble and Dlg1 and regulates epithelial junctions and contractility. *J. Cell Biol.* 218: 2699-2725.
- Fedoryshchak, R.O., et al. 2020. Molecular basis for substrate specificity of the Phactr1/PP1 phosphatase holoenzyme. *Elife* 9: e61509.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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