

FMNL2 (G-8): sc-390208

BACKGROUND

Formin-like protein 2 (FMNL2, formin homology 2 domain-containing protein 2, FHOD2) is a 1,087 amino acid protein encoded by the human gene FMNL2. FMNL2 belongs to the formin homology family and has one DAD (diaphanous autoregulatory) domain, one FH2 (formin homology 2) domain, and one GBD/FH3 (Rho GTPase-binding/formin homology 3) domain. Formins are a conserved class of proteins expressed in all eukaryotes, with known roles in generating cellular Actin-based structures. Formin-related proteins have been implicated in morphogenesis, cytokinesis, and cell polarity. FMNL2 is believed to play a role in the control of cell motility and survival of macrophages.

REFERENCES

1. Yayoshi-Yamamoto, S., et al. 2000. FRL, a novel formin-related protein, binds to Rac and regulates cell motility and survival of macrophages. *Mol. Cell Biol.* 20: 6872-6881.
2. Katoh, M. and Katoh, M. 2003. Identification and characterization of human FMNL1, FMNL2 and FMNL3 genes in silico. *Int. J. Oncol.* 22: 1161-1168.
3. Katoh, M. and Katoh, M. 2004. Identification and characterization of the human FMN1 gene in silico. *Int. J. Mol. Med.* 14: 121-126.
4. Harris, E.S., et al. 2004. The mouse formin, FRL α , slows Actin filament barbed end elongation, competes with capping protein, accelerates polymerization from monomers, and severs filaments. *J. Biol. Chem.* 279: 20076-20087.
5. Favaro, P.M., et al. 2006. High expression of FMNL1 protein in T non-Hodgkin's lymphomas. *Leuk. Res.* 30: 735-738.
6. Schwartzberg, P.L. 2007. Formin the way. *Immunity* 26: 139-141.
7. Gomez, T.S., et al. 2007. Formins regulate the Actin-related protein 2/3 complex-independent polarization of the centrosome to the immunological synapse. *Immunity* 26: 177-190.

CHROMOSOMAL LOCATION

Genetic locus: FMNL2 (human) mapping to 2q23.3; Fmnl2 (mouse) mapping to 2 C1.1.

SOURCE

FMNL2 (G-8) is a mouse monoclonal antibody raised against amino acids 461-505 mapping within an internal region of FMNL2 of human origin.

PRODUCT

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

STORAGE

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

PROTOCOLS

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

APPLICATIONS

FMNL2 (G-8) is recommended for detection of FMNL2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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 FMNL2 siRNA (h): sc-62327, FMNL2 siRNA (m): sc-62328, FMNL2 shRNA Plasmid (h): sc-62327-SH, FMNL2 shRNA Plasmid (m): sc-62328-SH, FMNL2 shRNA (h) Lentiviral Particles: sc-62327-V and FMNL2 shRNA (m) Lentiviral Particles: sc-62328-V.

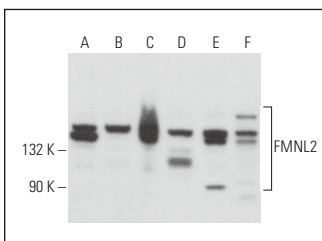
Molecular Weight of FMNL2: 123 kDa.

Positive Controls: IMR-32 cell lysate: sc-2409, Jurkat whole cell lysate: sc-2204 or KNRK whole cell lysate: sc-2214.

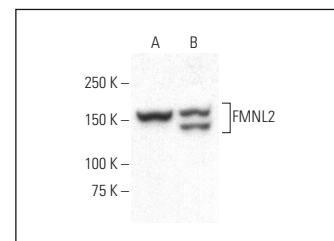
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



FMNL2 (G-8): sc-390208. Western blot analysis of FMNL2 expression in IMR-32 (A), Jurkat (B), HUV-EC-C (C), MM-142 (D), 3T3-L1 (E) and KNRK (F) whole cell lysates.



FMNL2 (G-8): sc-390208. Western blot analysis of FMNL2 expression in IMR-32 (A) and HeLa (B) whole cell lysates. Detection reagent used: m-IgG_{2b} BP-HRP: sc-542741.

SELECT PRODUCT CITATIONS

1. Young, L.E., et al. 2018. Roles for Ena/VASP proteins in FMNL3-mediated filopodial assembly. *J. Cell Sci.* 131: jcs220814.

RESEARCH USE

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