

FMNL2 (32-T): sc-100943

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., Taniuchi, I. and Watanabe, T. 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., Li, F. and Higgs, H.N. 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., Traina, F., Vassallo, J., Brousset, P., Delsol, G., Costa, F.F. and Saad, S.T. 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., Kumar, K., Medeiros, R.B., Shimizu, Y., Leibson, P.J. and Billadeau, D.D. 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 (32-T) is a mouse monoclonal antibody raised against recombinant FMNL2 of human origin.

PRODUCT

Each vial contains 100 μ g IgG₁ kappa light chain in 1.0 ml 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.

APPLICATIONS

FMNL2 (32-T) is recommended for detection of FMNL2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)].

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.

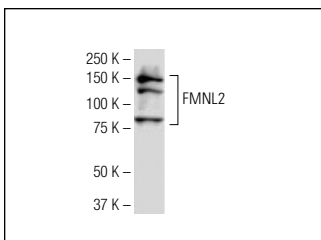
Molecular Weight of FMNL2: 123 kDa.

Positive Controls: IMR-32 cell lysate: sc-2409.

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, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



FMNL2 (32-T): sc-100943. Western blot analysis of FMNL2 expression in IMR-32 whole cell lysate.

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.