

## FMNL2 (N-17): sc-66764

### 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 $\alpha$ , 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 (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of FMNL2 of human origin.

### PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-66764 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

FMNL2 (N-17) is recommended for detection of FMNL2, also designated Formin-like 2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

FMNL2 (N-17) is also recommended for detection of FMNL2, also designated Formin-like 2 in additional species, including equine, bovine and porcine.

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 SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

### 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](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **FMNL2 (D-3): sc-390298** or **FMNL2 (G-8): sc-390208**, our highly recommended monoclonal alternatives to FMNL2 (N-17).