## SANTA CRUZ BIOTECHNOLOGY, INC.

# FMNL1 (D-14): sc-66757



## BACKGROUND

Formin-like protein 1 (FMNL1, formin-related protein, FrI) is a 1,094 amino acid protein encoded by the mouse gene Fmnl1. FMNL1 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 gener-ating cellular actin-based structures. FMNL1 is believed to play a role in the control of cell motility and survival of macrophages. FMNL1 has been found to interact with RAC1, PFN1 and PFN2 and can block apoptotic cell death and inhibit cell adhesion and migration. FMNL1 is located in the cytoplasm and is highly expressed in the spleen, lymph node and bone marrow cells.

## REFERENCES

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- Harris, E.S., Li, F. and Higgs, H.N. 2004. The mouse formin, FRLα, slows actin filament barbed end elongation, competes with capping protein, accelerates polymerization from monomers and severs filaments. J. Biol. Chem. 279: 20076-20087.
- 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.
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- 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: Fmnl1 (mouse) mapping to 11 E1.

#### SOURCE

FMNL1 (D-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of FMNL1 of mouse origin.

#### STORAGE

Store at 4° C, \*\*D0 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 or our catalog for detailed protocols and support products.

## PRODUCT

Each vial contains 100  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-66757 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

FMNL1 (D-14) is recommended for detection of FMNL1, also designated Formin-like protein 1 of mouse and rat origin by Western Blotting (starting dilution 1:200, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for FMNL1 siRNA (m): sc-62326, FMNL1 shRNA Plasmid (m): sc-62326-SH and FMNL1 shRNA (m) Lentiviral Particles: sc-62326-V.

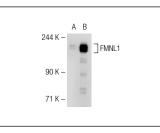
Molecular Weight of FMNL1: 160 kDa.

Positive Controls: FMNL1 (m2): 293 Lysate: sc-178620 or mouse spleen extract: sc-2391.

#### **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™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), 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). 3) 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™ Mounting Medium: sc-24941.

#### DATA



FMNL1 (D-14): sc-66757. Western blot analysis of FMNL1 expression in non-transfected: sc-110760 (A) and mouse FMNL1 transfected: sc-178620 (B) 293 whole cell lysates.

#### **RESEARCH USE**

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