FMNL1 (m2): 293 Lysate: sc-178620



The Power to Question

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 generating 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

- 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.
- 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: Fmnl1 (mouse) mapping to 11 E1.

PRODUCT

FMNL1 (m2): 293 Lysate represents a lysate of mouse FMNL1 transfected 293 cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

APPLICATIONS

FMNL1 (m2): 293 Lysate is suitable as a Western Blotting positive control for mouse reactive FMNL1 antibodies. Recommended use: 10-20 µl per lane.

Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

PROTOCOLS

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

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com