

SKAP55 (35): sc-136068

BACKGROUND

Fyb (Fyn binding protein) and the anchoring proteins SKAP55 and SKAP55-R (SKAP55-related protein) associate with the tyrosine kinase p59Fyn. SKAP55 and SKAP55-R bind to Fyb through their SH3 domains and function as substrates for p59Fyn in resting T cells. SKAP55 contains an N-terminal Pleckstrin homology domain and a C-terminal SH3 domain binding motif of adjacent arginine and lysine residues followed by tandem tyrosines (i.e. RKxxYxxY). SKAP55-R, similar in overall structure to SKAP55, contains a coiled-coil N-terminal domain. SKAP55 associates with SLAP-130, another component of the Fyn complex, which plays a role in the regulation of signaling events initiated by lymphocyte antigen receptors leading up to T cell activation. The human SKAP55 gene maps to chromosome 17q21.32 and encodes a 359 amino acid protein.

REFERENCES

1. Marie-Cardine, A., Bruyns, E., Eckerskorn, C., Kirchgessner, H., Meuer, S.C. and Schraven, B. 1997. Molecular cloning of SKAP55, a novel protein that associates with the protein tyrosine kinase p59fyn in human T-lymphocytes. *J. Biol. Chem.* 272: 16077-16080.
2. Marie-Cardine, A., Hendricks-Taylor, L.R., Boerth, N.J., Zhao, H., Schraven, B. and Koretzky, G.A. 1998. Molecular interaction between the Fyn-associated protein SKAP55 and the SLP-76-associated phosphoprotein SLAP-130. *J. Biol. Chem.* 273: 25789-25795.
3. Liu, J., Kang, H., Raab, M., da Silva, A.J., Kraeft, S.K. and Rudd C.E. 1998. Fyb (Fyn binding protein) serves as a binding partner for lymphoid protein and Fyn kinase substrate SKAP55 and a SKAP55-related protein in T cells. *Proc. Natl. Acad. Sci. USA* 95: 8779-8784.
4. Peterson, E.J., Clements, J.L., Fang, N. and Koretzky, G.A. 1998. Adaptor proteins in lymphocyte antigen-receptor signaling. *Curr. Opin. Immunol.* 10: 337-344.
5. Marie-Cardine, A., Kirchgessner, H. and Schraven, B. 1999. Molecular alterations of the Fyn-complex occur as late events of human T cell activation. *Eur. J. Immunol.* 29: 1175-1187.

CHROMOSOMAL LOCATION

Genetic locus: SKAP1 (human) mapping to 17q21.32; Skap1 (mouse) mapping to 11 D.

SOURCE

SKAP55 (35) is a mouse monoclonal antibody raised against amino acids 154-353 of SKAP55 of human origin.

PRODUCT

Each vial contains 50 µg IgG₁ in 0.5 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.

APPLICATIONS

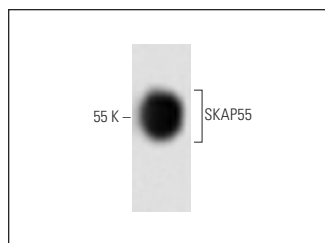
SKAP55 (35) is recommended for detection of SKAP55 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for SKAP55 siRNA (h): sc-40599, SKAP55 siRNA (m): sc-153475, SKAP55 shRNA Plasmid (h): sc-40599-SH, SKAP55 shRNA Plasmid (m): sc-153475-SH, SKAP55 shRNA (h) Lentiviral Particles: sc-40599-V and SKAP55 shRNA (m) Lentiviral Particles: sc-153475-V.

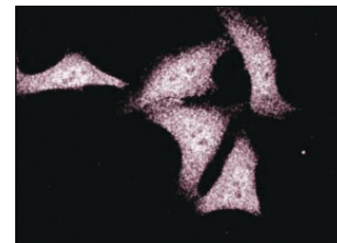
Molecular Weight of SKAP55: 55 kDa.

Positive Controls: SUP-T1 whole cell lysate: sc-364796, Jurkat whole cell lysate: sc-2204 or rat thymus extract: sc-2401.

DATA



SKAP55 (35): sc-136068. Western blot analysis of SKAP55 expression in rat thymus tissue extract.



SKAP55 (35): sc-136068. Immunofluorescence staining of HeLa cells showing nuclear and cytoplasmic localization.

RESEARCH USE

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

PROTOCOLS

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