

SKAP55 (E-8): sc-390458

BACKGROUND

Fyb (fyn binding protein) and the anchoring proteins SKAP55 and SKAP55-R (SKAP55-related protein) associate with the tyrosine kinase p59^{fyn}. SKAP55 and SKAP55-R bind to Fyb through their SH3 domains and function as substrates for p59^{fyn} 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., et al. 1997. Molecular cloning of SKAP55, a novel protein that associates with the protein tyrosine kinase p59^{fyn} in human T-lymphocytes. *J. Biol. Chem.* 272: 16077-16080.
2. Marie-Cardine, A., et al. 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., et al. 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., et al. 1998. Adaptor proteins in lymphocyte antigen-receptor signaling. *Curr. Opin. Immunol.* 10: 337-344.
5. Marie-Cardine, A., et al. 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.

SOURCE

SKAP55 (E-8) is a mouse monoclonal antibody raised against amino acids 144-221 mapping within an internal region of SKAP55 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

SKAP55 (E-8) is available conjugated to agarose (sc-390458 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390458 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390458 PE), fluorescein (sc-390458 FITC), Alexa Fluor® 488 (sc-390458 AF488), Alexa Fluor® 546 (sc-390458 AF546), Alexa Fluor® 594 (sc-390458 AF594) or Alexa Fluor® 647 (sc-390458 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390458 AF680) or Alexa Fluor® 790 (sc-390458 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

SKAP55 (E-8) is recommended for detection of SKAP55 of human origin by Western Blotting (starting dilution 1:100, 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 SKAP55 siRNA (h): sc-40599, SKAP55 shRNA Plasmid (h): sc-40599-SH and SKAP55 shRNA (h) Lentiviral Particles: sc-40599-V.

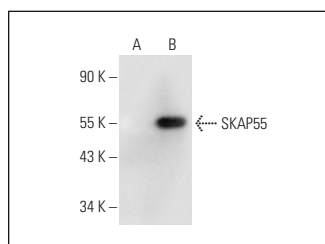
Molecular Weight of SKAP55: 55 kDa.

Positive Controls: SKAP55 (h): 293T Lysate: sc-116192.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



SKAP55 (E-8): sc-390458. Western blot analysis of SKAP55 expression in non-transfected: sc-117752 (A) and human SKAP55 transfected: sc-116192 (B) 293T whole cell lysates.

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 for detailed protocols and support products.