

SKAP55-R (K-13): sc-25971

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. RKxxY-xxY). 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 p59fyn 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.
6. Kang, H., et al. 2000. SH3 domain recognition of a proline-independent tyrosine-based RKxxYxxY motif in immune cell adaptor SKAP55. *EMBO J.* 19: 2889-2899.

CHROMOSOMAL LOCATION

Genetic locus: Scap1 (mouse) mapping to 11 D.

SOURCE

SKAP55-R (K-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of SKAP55-R of mouse origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-25971 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

SKAP55-R (K-13) is recommended for detection of SKAP55-R of mouse and rat 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), immunohistochemistry (including paraffin-embedded sections) (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 (m): sc-153475, SKAP55 shRNA Plasmid (m): sc-153475-SH and SKAP55 shRNA (m) Lentiviral Particles: sc-153475-V.

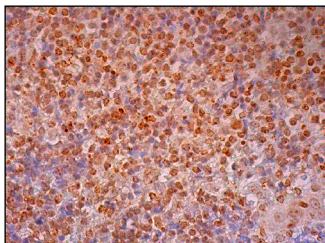
Molecular Weight of SKAP55-R: 55 kDa.

Positive Controls: TK-1 whole cell lysate: sc-364798, mouse thymus extract: sc-2406 or rat thymus extract: sc-2401.

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 Blotting 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™ Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



SKAP55-R (K-13): sc-25971. Immunoperoxidase staining of formalin fixed, paraffin-embedded human tonsil tissue showing cytoplasmic and nuclear staining of cells in germinal center and cells in non-germinal center.

STORAGE

Store at 4° C, **DO 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.