

Fyb (C-20): sc-7105

BACKGROUND

Fyb (Fyn binding protein) and the anchoring proteins SKAP55 (src kinase-associated phosphoprotein) 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 amino-terminal pleckstrin homology domain and a carboxy-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 Fyb gene maps to chromosome 5p13.1 and encodes a 783 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.
7. LocusLink Report (LocusID: 2533). <http://www.ncbi.nlm.nih.gov/LocusLink/>

CHROMOSOMAL LOCATION

Genetic locus: Fyb (human) mapping to 5p13.1; Fyb (mouse) mapping to 15 A1.

SOURCE

Fyb (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping to the C-terminus of Fyb of human 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-7105 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Fyb (C-20) is recommended for detection of Fyb of mouse, rat and human 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Fyb (C-20) is also recommended for detection of Fyb in additional species, including bovine and porcine.

Suitable for use as control antibody for Fyb siRNA (h): sc-40597, Fyb siRNA (m): sc-40598, Fyb shRNA Plasmid (h): sc-40597-SH, Fyb shRNA Plasmid (m): sc-40598-SH, Fyb shRNA (h) Lentiviral Particles: sc-40597-V and Fyb shRNA (m) Lentiviral Particles: sc-40598-V.

Molecular Weight of Fyb-120 isoform: 120 kDa.

Molecular Weight of Fyb-130 isoform: 130 kDa.

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) 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.

SELECT PRODUCT CITATIONS

1. Amanchy, R., et al. 2009. Identification of c-Src tyrosine kinase substrates in platelet-derived growth factor receptor signaling. *Mol. Oncol.* 3: 439-450.

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 or our catalog for detailed protocols and support products.



Try **Fyb (C-8): sc-515372** or **Fyb (H-3): sc-393276**, our highly recommended monoclonal alternatives to Fyb (C-20).