SANTA CRUZ BIOTECHNOLOGY, INC.

SKAP55-R (C-9): sc-398285

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 17q15.2 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.

CHROMOSOMAL LOCATION

Genetic locus: SKAP2 (human) mapping to 7p15.2; Skap2 (mouse) mapping to 6 B3.

SOURCE

SKAP55-R (C-9) is a mouse monoclonal antibody raised against amino acids 142-267 mapping within an internal region of SKAP55-R of human origin.

PRODUCT

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

SKAP55-R (C-9) is available conjugated to agarose (sc-398285 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-398285 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398285 PE), fluorescein (sc-398285 FITC), Alexa Fluor® 488 (sc-398285 AF488), Alexa Fluor® 546 (sc-398285 AF546), Alexa Fluor® 594 (sc-398285 AF594) or Alexa Fluor® 647 (sc-398285 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398285 AF680) or Alexa Fluor® 790 (sc-398285 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

SKAP55-R (C-9) is recommended for detection of SKAP55-R of mouse, rat and 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-R siRNA (h): sc-40600, SKAP55-R siRNA (m): sc-40601, SKAP55-R shRNA Plasmid (h): sc-40600-SH, SKAP55-R shRNA Plasmid (m): sc-40601-SH, SKAP55-R shRNA (h) Lentiviral Particles: sc-40600-V and SKAP55-R shRNA (m) Lentiviral Particles: sc-40601-V.

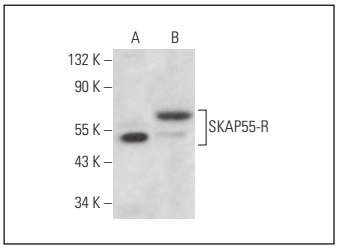
Molecular Weight of SKAP55-R: 55 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, RAW 264.7 whole cell lysate: sc-2211 or human platelet extract: sc-363773.

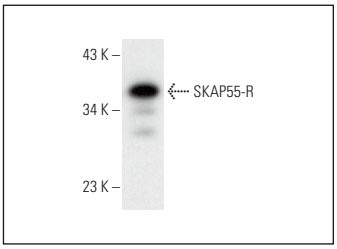
RECOMMENDED SUPPORT REAGENTS

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-R (C-9): sc-398285. Western blot analysis of SKAP55-R expression in HeLa (**A**) and RAW 264.7 (**B**) whole cell lysates.



SKAP55-R (C-9): sc-398285. Western blot analysis of SKAP55-R expression in human platelet extract.

SELECT PRODUCT CITATIONS

1. Su, G., et al. 2019. A distal enhancer maintaining Hoxa1 expression orchestrates retinoic acid-induced early ESCs differentiation. Nucleic Acids Res. 47: 6737-6752.
2. Ghelman, J., et al. 2021. SKAP2 as a new regulator of oligodendroglial migration and myelin sheath formation. Glia 69: 2699-2716.

RESEARCH USE

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