

SWAP-70 (Z-24): sc-130887

BACKGROUND

SWAP-70 is a protein that is part of a protein complex that catalyzes cell-free DNA recombination between immunoglobulin (Ig) heavy chain gene-switch region substrates. In resting B lymphocytes, SWAP-70 is localized mainly in the cytoplasm, however, in activated B cells, SWAP-70 is recruited to the plasma membrane and then translocates to the nucleus. In the nucleus, SWAP-70 recognizes specific switch regions, acting as a switch recombinase and causing a DNA break. The cellular and intracellular localization before and after B cell activation also suggests a role for SWAP-70 in signaling in B cell activation. In addition, SWAP-70 contains three nuclear localization signals, has a weak affinity for DNA, binds ATP and forms specific, high affinity complexes with B23, C23 and poly (ADP-ribose) polymerase.

REFERENCES

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- Borggreffe, T., Wabl, M., Akhmedov, A.T. and Jessberger, R. 1999. Cellular, intracellular, and developmental expression patterns of murine SWAP-70. *Eur. J. Immunol.* 29: 1812-1822.
- Qi, C.F., Jessberger, R., Torrey, T.A., Taddesse-Heath, L., Ohta, Y. and Morse, H.C., 3rd. 1999. Differential regulation of germinal center genes, BCL6 and SWAP-70, during the course of MAIDS. *Mol. Immunol.* 36: 1043-1053.
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- Masat, L., Liddell, R.A., Mock, B.A., Kuo, W.L., Jessberger, R., Wabl, M. and Morse, H.C. 2000. Mapping of the SWAP-70 gene to mouse chromosome 7 and human chromosome 11p15. *Immunogenetics* 51: 16-19.

CHROMOSOMAL LOCATION

Genetic locus: SWAP70 (human) mapping to 11p15.4.

SOURCE

SWAP-70 (Z-24) is a purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of SWAP-70 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml 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.

PROTOCOLS

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

APPLICATIONS

SWAP-70 (Z-24) is recommended for detection of SWAP-70 of 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for SWAP-70 siRNA (h): sc-106898, SWAP-70 shRNA Plasmid (h): sc-106898-SH and SWAP-70 shRNA (h) Lentiviral Particles: sc-106898-V.

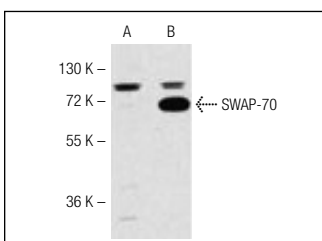
Molecular Weight of SWAP-70: 70 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Hep G2 cell lysate: sc-2227 or Daudi cell lysate: sc-2415.

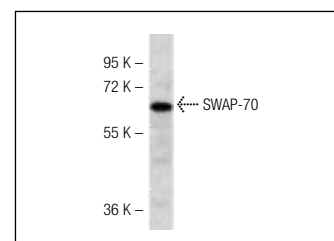
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



SWAP-70 (Z-24): sc-130887. Western blot analysis of SWAP-70 expression in non-transfected (A) and human SWAP-70 transfected (B) 293 whole cell lysates.



SWAP-70 (Z-24): sc-130887. Western blot analysis of SWAP-70 expression in Hep G2 whole cell lysate.

RESEARCH USE

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

MONOS
Satisfaction
Guaranteed

Try **SWAP-70 (F-3): sc-390431** or **SWAP-70 (Q-28): sc-81991**, our highly recommended monoclonal alternatives to SWAP-70 (Z-24).