**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**


**CHROMOSOMAL LOCATION**

Genetic locus: SWAP70 (human) mapping to 11p15.4; Swap70 (mouse) mapping to 7 F1.

**SOURCE**

SWAP-70 (Q-28) is a mouse monoclonal antibody raised against recombinant SWAP-70 of human origin.

**PRODUCT**

Each vial contains 50 µg IgG2a kappa light chain in 0.5 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

SWAP-70 (Q-28) is recommended for detection of SWAP-70 of mouse, rat and 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)], 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).


Molecular Weight of SWAP-70: 70 kDa.

Positive Controls: RAW 264.7 whole cell lysate: sc-2211, Daudi cell lysate: sc-2415 or HeLa whole cell lysate: sc-2200.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:


**DATA**

**SELECT PRODUCT CITATIONS**


**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 website at www.scbt.com for detailed protocols and support products.