# SLP-76 (SLP-76/03): sc-51698



The Power to Question

#### **BACKGROUND**

The translational product of the Vav proto-oncogene is exclusively expressed in cells of hematopoietic origin and is critical for lymphocyte development and activation. However, the biochemical basis of Vav's function is unclear. Vav contains a single SH2 domain that is required for its association with the T cell receptor (TCR). Overexpression of Vav or SLP-76 in Jurkat cells leads to NFAT activation and IL-2 production. When co-expressed, Vav and SLP-76 synergize to induce a robust basal and TCR-mediated IL-2 response. Although SLP-76 does not contain a motif that would indicate it to be a member of the tyrosine, serine/threonine or lipid kinase families, it does contain several putative SH2/SH3-binding domains and has been shown to physically associate with the adapter protein GRB2 as well as PLC  $\gamma1$ . The discovery of SLP-76 represents an important step in elucidating the mechanism of Vav transformation and TCR-mediated NFAT activation.

# **REFERENCES**

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- Wu, J., Motto, D.G., Koretzky, G.A. and Weiss, A. 1996. Vav and SLP-76 interact and functionally cooperate in IL-2 gene activation. Immunity 4: 593-602.
- Motto, D.G., Ross, S.E., Wu, J., Hendricks-Taylor, L.R. and Koretzky, G.A. 1996. Implication of the GRB2-associated phosphoprotein SLP-76 in T cell receptor-mediated interleukin-2 production. J. Exp. Med. 183: 1937-1943.

### CHROMOSOMAL LOCATION

Genetic locus: LCP2 (human) mapping to 5q35.1; Lcp2 (mouse) mapping to 11 A4.

# SOURCE

SLP-76 (SLP-76/03) is a mouse monoclonal antibody raised against amino acids 216-434 SLP-76 of human origin.

#### **RESEARCH USE**

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

#### **PRODUCT**

Each vial contains 100  $\mu g$   $lgG_{2b}$  in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

# **APPLICATIONS**

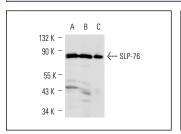
SLP-76 (SLP-76/03) is recommended for detection of SLP-76 of mouse, rat, human and porcine origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)].

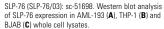
Suitable for use as control antibody for SLP-76 siRNA (h): sc-36501, SLP-76 siRNA (m): sc-36502, SLP-76 shRNA Plasmid (h): sc-36501-SH, SLP-76 shRNA Plasmid (m): sc-36502-SH, SLP-76 shRNA (h) Lentiviral Particles: sc-36501-V and SLP-76 shRNA (m) Lentiviral Particles: sc-36502-V.

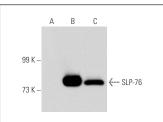
Molecular Weight of SLP-76: 76 kDa.

Positive Controls: SLP-76 (m): 293T Lysate: sc-126013, BJAB whole cell lysate: sc-2207 or AML-193 whole cell lysate: sc-364182.

#### DATA







SLP-76 (SLP-76/03): sc-51698. Western blot analysis of SLP-76 expression in non-transfected 293T: sc-17752 (A), mouse SLP-76 transfected 293T: sc-12613 (B) and BJAB (C) whole cell lysates.

# **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 for detailed protocols and support products.

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