SANTA CRUZ BIOTECHNOLOGY, INC.

SLP-76 (H-300): sc-9062

SANTA CRUZ BIOTECHNOLOGY

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 (SH2 domain-containing leukocyte protein) 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 γ1. The discovery of SLP-76 represents an important step in elucidating the mechanism of Vav transformation and TCR-mediated NFAT activation.

CHROMOSOMAL LOCATION

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

SOURCE

SLP-76 (H-300) is a rabbit polyclonal antibody raised against amino acids 234-533 of SLP-76 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.

APPLICATIONS

SLP-76 (H-300) is recommended for detection of SLP-76 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

SLP-76 (H-300) is also recommended for detection of SLP-76 in additional species, including equine, canine and porcine.

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 THP-1 cell lysate: sc-2238.

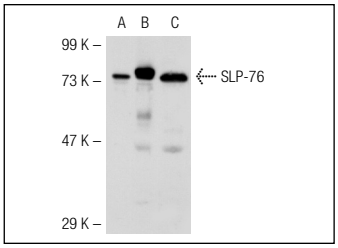
STORAGE

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

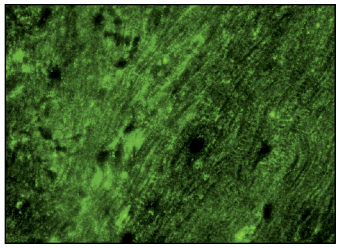
RESEARCH USE

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

DATA



SLP-76 (H-300): sc-9062. Western blot analysis of SLP-76 expression in non-transfected 293T: sc-117752 (**A**), mouse SLP-76 transfected 293T: sc-126013 (**B**) and BJAB (**C**) whole cell lysates.



SLP-76 (H-300): sc-9062. Immunofluorescence staining of normal mouse heart frozen section showing cytoplasmic staining.

SELECT PRODUCT CITATIONS

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4. Cowley, S.M., et al. 2005. The mSin3A chromatin-modifying complex is essential for embryogenesis and T-cell development. Mol. Cell. Biol. 25: 6990-7004.
5. Abramovich, D., et al. 2009. Spatiotemporal analysis of the protein expression of angiogenic factors and their related receptors during folliculogenesis in rats with and without hormonal treatment. Reproduction 137: 309-320.
6. Stevens, C.N., et al. 2010. T-cell receptor early signalling complex activation in response to interferon-α receptor stimulation. Biochem. J. 428: 429-437.
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9. Song, S., et al. 2011. A requirement for the p85 PI3K adapter protein BCAP in the protection of macrophages from apoptosis induced by endoplasmic reticulum stress. J. Immunol. 187: 619-625.