SANTA CRUZ BIOTECHNOLOGY, INC.

SLP-76 (C-20): sc-1961



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 γ 1. 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 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus 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.

Blocking peptide available for competition studies, sc-1961 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SLP-76 (C-20) 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 μ g per 100-500 μ g 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 (C-20) is also recommended for detection of SLP-76 in additional species, including equine, canine, bovine 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 (C-20): sc-1961. Western blot analysis of SLP-76 expression in non-transfected: sc-117752 (A) and mouse SLP-76 transfected: sc-126013 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- 1. Pivniouk, V., et al. 1998. Impaired viability and profound block in thymocyte development in mice lacking the adaptor protein SLP-76. Cell 94: 229-238.
- 2. Bonilla, F.A. 2000. Adapter proteins SLP-76 and BLNK both are expressed by murine macrophages and are linked to signaling via $Fc\gamma$ receptors I and II/III. Proc. Natl. Acad. Sci. USA 97: 1725-1730.
- 3. Manetz, T., et al. 2001. Vav1 regulates phospholispase Cγ activation and calcium responses in mast cells. Mol. Cell. Biol. 21: 3763-3774.
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MONOS Satisfation Guaranteed

Try SLP-76 (F-7): sc-13151 or SLP-76 (8): sc-136070, our highly recommended monoclonal alternatives to SLP-76 (C-20).