

SLAM (N-19): sc-1334

BACKGROUND

Following occupancy of the T cell receptor by antigen, T cell proliferation and lymphokine production are determined by a second costimulatory signal delivered by a ligand expressed on antigen-presenting cells. SLAM (for signaling lymphocyte-activation molecule, also designated CDw150) is a novel receptor on T cells that, when engaged, potentiates T cell expansion in a CD28-independent manner. SAP (for SLAM-associated protein) contains an SH2 domain and functions to inhibit SH-PTP2 recruitment to the SLAM docking site, an activity induced by Fyn phosphorylation of SLAM. Mutations of the SAP gene may be associated with X-linked lymphoproliferative disease (XLP).

REFERENCES

- Freeman, G.J., et al. 1991. Structure, expression, and T cell costimulatory activity of the murine homologue of the human B lymphocyte activation antigen B7. *J. Exp. Med.* 174: 625-631.
- Cocks, B.G., et al. 1995. A novel receptor involved in T cell activation. *Nature* 376: 260-263.
- Aversa, G., et al. 1997. Engagement of the signaling lymphocytic activation molecule (SLAM) on activated T cells results in IL-2-independent, cyclosporin A-sensitive T cell proliferation and IFN- γ production. *J. Immunol.* 158: 4036-4044.

CHROMOSOMAL LOCATION

Genetic locus: SLAMF1 (human) mapping to 1q23.3.

SOURCE

SLAM (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of SLAM of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-1334 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SLAM (N-19) is recommended for detection of SLAM of 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).

Suitable for use as control antibody for SLAM siRNA (h): sc-42974, SLAM shRNA Plasmid (h): sc-42974-SH and SLAM shRNA (h) Lentiviral Particles: sc-42974-V.

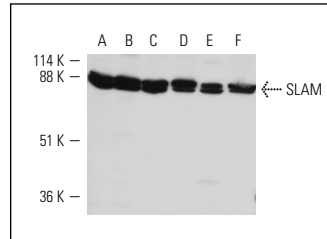
Molecular Weight of SLAM: 70 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, MOLT-4 cell lysate: sc-2233 or HuT 78 whole cell lysate: sc-2208.

STORAGE

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

DATA



SLAM (N-19): sc-1334. Western blot analysis of SLAM expression in Jurkat (A), MOLT-4 (B), HuT 78 (C), NAMALWA (D) and Hs 67 (E) whole cell lysates.

SELECT PRODUCT CITATIONS

- Hamalainen, H., et al. 2000. Signaling lymphocytic activation molecule (SLAM) is differentially expressed in human Th1 and Th2 cells. *J. Immunol. Methods* 242: 9-19.
- Nakamura, H., et al. 2001. Abnormal T cell receptor signal transduction of CD4 Th cells in X-linked lymphoproliferative syndrome. *J. Immunol.* 167: 2657-2665.
- Pasquinelli, V., et al. 2004. Expression of signaling lymphocytic activation molecule-associated protein interrupts IFN- γ production in human tuberculosis. *J. Immunol.* 172: 1177-1185.
- Quiroga, M.F., et al. 2004. Activation of signaling lymphocytic activation molecule triggers a signaling cascade that enhances Th1 responses in human intracellular infection. *J. Immunol.* 173: 4120-4129.
- Chuang, H.C., et al. 2005. Epstein-Barr virus LMP1 inhibits the expression of SAP gene and upregulates Th1 cytokines in the pathogenesis of hemophagocytic syndrome. *Blood* 106: 3090-3096.

PROTOCOLS

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

RESEARCH USE

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



Try **SLAM (E-11): sc-166939**, our highly recommended monoclonal alternative to SLAM (N-19).