## SANTA CRUZ BIOTECHNOLOGY, INC.

# p-SLAM (Tyr 281): sc-130605



### 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 lympho-proliferative disease (XLP).

## REFERENCES

- Freeman, G.J., Gray, G.S., Gimmi, C.D., Lombard, D.B., Zhou, L.J., White, M., Fingeroth, J.D., Gribben, J.G. and Nadler, L.M. 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., Chang, C.C., Carballido, J.M., Yssel, H., de Vries, J.E. and Aversa, G. 1995. A novel receptor involved in T cell activation. Nature 376: 260-263.
- Aversa, G., Carballido, J., Punnonen, J., Chang, C.C., Hauser, T., Cocks, B.G. and De Vries, J.E. 1997. SLAM and its role in T cell activation and Th cell responses. Immunol. Cell Biol. 75: 202-205.
- Aversa, G., Chang, C.C., Carballido, J.M., Cocks, B.G. and de Vries, J.E. 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.
- Favero, J. and Lafont, V. 1998. Effector pathways regulating T cell activation. Biochem. Pharmacol. 56: 1539-1547.
- Sayos, J., Wu, C., Morra, M., Wang, N., Zhang, X., Allen, D., van Schaik, S., Notarangelo, L., Geha, R., Roncarolo, M.G., Oettgen, H., De Vries, J.E., Aversa, G. and Terhorst, C. 1998. The X-linked lymphoproliferative-disease gene product SAP regulates signals induced through the co-receptor SLAM. Nature 395: 462-469.

## CHROMOSOMAL LOCATION

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

## SOURCE

p-SLAM (Tyr 281) is a rabbit polyclonal antibody raised against a short amino acid sequence containing phosphorylated Tyr 281 of SLAM of human origin.

#### PRODUCT

Each vial contains 100  $\mu g$  lgG in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

#### **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### APPLICATIONS

p-SLAM (Tyr 281) is recommended for detection of Tyr 281 phosphorylated SLAM of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) 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 p-SLAM: 70 kDa.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto B Blocking Reagent: sc-2335 (use 50 mM NaF, sc-24988, as diluent) and Western Blotting Luminol Reagent: sc-2048.

## **RESEARCH USE**

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

#### PROTOCOLS

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