

SLAMF9 (K-16): sc-49746

BACKGROUND

Signaling lymphocyte-activation molecule (SLAM), also designated CDw150, is a novel receptor on T cells that, when engaged, potentiates T cell expansion in a CD28-independent manner. SLAM is expressed on B and T lymphocytes, dendritic cells and endothelial cells, and is thought to be a marker of activated B and T lymphocytes. SLAM family member 9 (SLAMF9), also designated CD2F-10 or CD84 homolog 1, is a 289 amino acid protein that shares 58% identity with the mouse protein. The SLAMF9 protein is predominantly expressed in hematopoietic tissues and contains a 19-residue signal peptide, an extracellular region with only two N-linked glycosylation sites, a 20-residue transmembrane region and a highly positively charged 30-residue cytoplasmic tail, suggesting a role for SLAMF9 as an adhesion molecule. SLAMF9 may function in the immune response as a coreceptor for lymphocyte activation.

REFERENCES

1. Fennelly, J.A., Tiwari, B., Davis, S.J. and Evans, E.J. 2001. CD2F-10: a new member of the CD2 subset of the immunoglobulin superfamily. *Immunogenetics* 53: 599-602.
2. Fraser, C.C., Howie, D., Morra, M., Qiu, Y., Murphy, C., Shen, Q., Gutierrez-Ramos, J.C., Coyle, A., Kingsbury, G.A. and Terhorst, C. 2002. Identification and characterization of SF2000 and SF2001, two new members of the immune receptor SLAM/CD2 family. *Immunogenetics* 53: 843-850.
3. Online Mendelian Inheritance in Man, OMIM[™]. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 608589. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Veillette, A. and Latour, S. 2003. The SLAM family of immune-cell receptors. *Curr. Opin. Immunol.* 15: 277-285.
5. Veillette, A. 2004. SLAM family receptors regulate immunity with and without SAP-related adaptors. *J. Exp. Med.* 199: 1175-1178.
6. Kiel, M.J., Yilmaz, O.H., Iwashita, T., Yilmaz, O.H., Terhorst, C. and Morrison, S.J. 2005. SLAM family receptors reveal endothelial niches for stem cells. *Cell* 121: 1109-1121.

CHROMOSOMAL LOCATION

Genetic locus: SLAMF9 (human) mapping to 1q23.2.

SOURCE

SLAMF9 (K-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of SLAMF9 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-49746 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

SLAMF9 (K-16) is recommended for detection of SLAMF9 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 SLAMF9 siRNA (h): sc-61559, SLAMF9 shRNA Plasmid (h): sc-61559-SH and SLAMF9 shRNA (h) Lentiviral Particles: sc-61559-V.

Molecular Weight of SLAMF9: 31.7 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

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.