# SLAMF9 (G-13): sc-49745



The Power to Question

#### **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**

- 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.
- 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/
- 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.
- 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; Slamf9 (mouse) mapping to 1 H3.

# SOURCE

SLAMF9 (G-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SLAMF9 of human origin.

#### **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-49745 P, (100  $\mu g$  peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **RESEARCH USE**

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

#### **APPLICATIONS**

SLAMF9 (G-13) is recommended for detection of SLAMF9 (SLAM family member 9) of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

SLAMF9 (G-13) is also recommended for detection of SLAMF9 (SLAM family member 9) in additional species, including canine.

Suitable for use as control antibody for SLAMF9 siRNA (h): sc-61559, SLAMF9 siRNA (m): sc-61560, SLAMF9 shRNA Plasmid (h): sc-61559-SH, SLAMF9 shRNA Plasmid (m): sc-61560-SH, SLAMF9 shRNA (h) Lentiviral Particles: sc-61559-V and SLAMF9 shRNA (m) Lentiviral Particles: sc-61560-V.

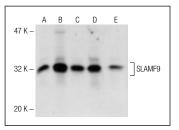
Molecular Weight of SLAMF9: 31.7 kDa.

Positive Controls: HEL 92.1.7 cell lysate: sc-2270, K-562 whole cell lysate: sc-2203 or THP-1 cell lysate: sc-2238.

#### **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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

### DATA



SLAMF9 (G-13): sc-49745. Western blot analysis of SLAMF9 expression in HEL 92.1.7 (A), K-562 (B), THP-1 (C), MEG-01 (D) and Jurkat (E) whole cell lysates.

### **STORAGE**

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

# **PROTOCOLS**

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