

SLAM (E-11): sc-166939

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. SLAM and its role in T cell activation and Th cell responses. *Immunol. Cell Biol.* 75: 202-205.
- 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.
- Favero, J. and Lafont, V. 1998. Effector pathways regulating T cell activation. *Biochem. Pharmacol.* 56: 1539-1547.

CHROMOSOMAL LOCATION

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

SOURCE

SLAM (E-11) is a mouse monoclonal antibody raised against amino acids 31-110 of SLAM of human origin.

PRODUCT

Each vial contains 200 μ g IgG $_1$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

SLAM (E-11) is available conjugated to agarose (sc-166939 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-166939 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-166939 PE), fluorescein (sc-166939 FITC), Alexa Fluor[®] 488 (sc-166939 AF488), Alexa Fluor[®] 546 (sc-166939 AF546), Alexa Fluor[®] 594 (sc-166939 AF594) or Alexa Fluor[®] 647 (sc-166939 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-166939 AF680) or Alexa Fluor[®] 790 (sc-166939 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor[®] is a trademark of Molecular Probes, Inc., Oregon, USA

RESEARCH USE

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

APPLICATIONS

SLAM (E-11) is recommended for detection of SLAM of human origin by Western Blotting (starting dilution 1:100, 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.

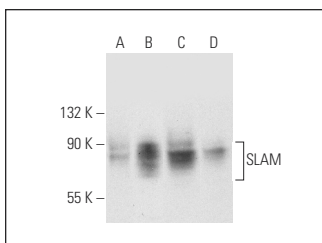
Molecular Weight of SLAM: 70 kDa.

Positive Controls: BJAB whole cell lysate: sc-2207, GA-10 whole cell lysate: sc-364230 or Raji whole cell lysate: sc-364236.

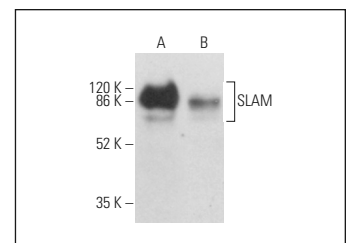
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



SLAM (E-11): sc-166939. Western blot analysis of SLAM expression in NAMALWA (A), BJAB (B), GA-10 (C) and Raji (D) whole cell lysates.



SLAM (E-11): sc-166939. Western blot analysis of SLAM expression in NAMALWA (A) and Raji (B) whole cell lysates. Detection reagent used: m-IgG κ BP-HRP: sc-516102.

SELECT PRODUCT CITATIONS

- Benko, A.L., et al. 2018. Repository corticotropin injection exerts direct acute effects on human B cell gene expression distinct from the actions of glucocorticoids. *Clin. Exp. Immunol.* 192: 68-81.
- Gomez-Torres, O., et al. 2022. SLAMF1 is expressed and secreted by hepatocytes and the liver in nonalcoholic fatty liver disease. *Am. J. Physiol. Gastrointest. Liver Physiol.* 323: G177-G187.

STORAGE

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