Anti-human SLAM/CD150 Antibody

ORDERING INFORMATION

Catalog Number: AF164

Lot Number: CBZK01

Size: 100 μg

Formulation: 0.2 μm filtered solution in PBS with 5% trehalose

Storage: -20° C

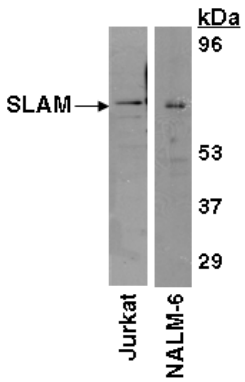
Reconstitution: sterile PBS

Specificity: human SLAM extracellular domain

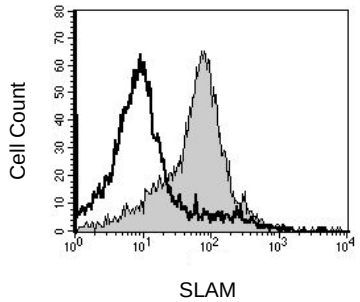
Immunogen: NS0-derived rhSLAM extracellular domain

Ig Type: sheep IgG

Applications: Western blot
Flow cytometry
Direct ELISA



Detection of SLAM with AF164.
Cell lysates were resolved by SDS-PAGE, transferred to an Immobilon-P membrane and immunoblotted with 1.0 μg/mL sheep anti-hSLAM.



Blood-derived lymphocytes were stained with anti-SLAM (R&D Systems, Cat. # AF164, filled histogram), or control antibody (R&D Systems, Cat. # 5-001-A, open histogram) followed by NL557-conjugated donkey anti-sheep IgG (R&D Systems, Cat. # NL010).

Background

SLAM (also IPO-3 and CD150) is a 70 - 80 kDa member of the CD2 family of molecules. It is a costimulatory receptor that mediates T cell activation via SAP. SLAM is found on B cells, dendritic cells, macrophages, stem cells and Th1 T cells. SLAM engages in homophilic interactions. Mature human SLAM is 315 amino acids (aa) in length. It is a type I transmembrane glycoprotein whose extracellular domain contains one V-type and one C2-type Ig-like domain (aa 21 - 237). There is a 77 aa SH2-binding cytoplasmic domain. Four potential splice variants are suggested. One shows a deletion of aa 234 - 263 (potentially soluble), while three others show aa substitutions; i.e.- a ten aa substitution for aa 289 - 335, a six aa substitution for aa 264 - 335 and a 20 aa substitution for aa 125 - 335 (potentially soluble). Over aa 1 - 236, human SLAM shares 60% aa identity with mouse SLAM.

Preparation

Produced in sheep immunized with purified, NS0-derived, recombinant human SLAM extracellular domain (rhSLAM; Accession # Q13291). Human SLAM specific IgG was purified by human SLAM affinity chromatography.

Formulation

Lyophilized from a 0.2 μm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

Reconstitution

Reconstitute with sterile PBS. If 0.5 mL of PBS is used, the antibody concentration will be 0.2 mg/mL.

Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C **in a manual defrost freezer** for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

Specificity

This antibody has been selected for its ability to recognize human SLAM in the applications listed below. In direct ELISAs, this antibody shows less than 5% cross-reactivity with rmSLAM, rhCD48, rhCD84 and rh2B4/CD244.

Applications

Western blot - An antibody concentration of 1.0 μg/mL is recommended.

Flow cytometry - This antibody was tested for flow cytometry using blood-derived lymphocytes (Cocks BG, *et al.* (1995) Nature **376**:260). Dilute this antibody to 25 μg/mL and add 10 μL of the diluted solution to 1 - 2.5 x 10^5 cells in a total reaction volume not exceeding 200 μL. The binding of unlabeled antibodies may be visualized by adding a secondary developing reagent such as anti-sheep IgG conjugated to a fluorochrome.

Direct ELISA - This antibody can be used at 0.5 - 1.0 μg/mL with the appropriate secondary reagents to detect human SLAM. The detection limit for rhSLAM is approximately 1 ng/well.

Optimal dilutions should be determined by each laboratory for each application.

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