

SLAMF3 Antibody

Catalog # ASC11305

Specification

SLAMF3 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes WB, IF, ICC, E <u>O9HBG7</u> NP_1769, 55925578 Human, Mouse, Rat Rabbit Polyclonal IgG SLAMF3 antibody can be used for detection of SLAMF3 by Western blot at 1 - 2 μg/mL. Antibody can also be used for immunocytochemistry starting at 10 μg/mL. For immunofluorescence start at 20 μg/mL.

SLAMF3 Antibody - Additional Information

Gene ID

4063

Target/Specificity LY9; At least three isoforms of SLAMF3 are known to exist. SLAMF3 antibody is predicted to not cross-react with other SLAM protein family members.

Reconstitution & Storage

SLAMF3 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions

SLAMF3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

SLAMF3 Antibody - Protein Information

Name LY9

Function

Self-ligand receptor of the signaling lymphocytic activation molecule (SLAM) family. SLAM receptors triggered by homo- or heterotypic cell-cell interactions are modulating the activation and differentiation of a wide variety of immune cells and thus are involved in the regulation and interconnection of both innate and adaptive immune response. Activities are controlled by presence or absence of small cytoplasmic adapter proteins, SH2D1A/SAP and/or SH2D1B/EAT-2. May participate in adhesion reactions between T lymphocytes and accessory cells by homophilic interaction. Promotes T-cell differentiation into a helper T-cell Th17 phenotype leading to increased IL-17 secretion; the costimulatory activity requires SH2D1A (PubMed:22184727). Promotes



recruitment of RORC to the IL-17 promoter (PubMed:22989874). May be involved in the maintenance of peripheral cell tolerance by serving as a negative regulator of the immune response. May disable autoantibody responses and inhibit IFN-gamma secretion by CD4(+) T-cells. May negatively regulate the size of thymic innate CD8(+) T-cells and the development of invariant natural killer T (iNKT) cells (By similarity).

Cellular Location

Membrane; Single-pass type I membrane protein. Cell membrane

Tissue Location

Increased surface expression on T-cells of systemic lupus erythematosus (SLE) patients.

SLAMF3 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

SLAMF3 Antibody - Images



Western blot analysis of SLAMF3 in 293 cell lysate with SLAMF3 antibody at (A) 1 and (B) 2 $\mu g/mL$





Immunocytochemistry of SLAMF3 in 293 cells with SLAMF3 antibody at 10 μ g/mL.



Immunofluorescence of SLAMF3 in 293 cells with SLAMF3 antibody at 20 μ g/mL.

SLAMF3 Antibody - Background

SLAMF3 Antibody: The signaling lymphocyte-activation molecule family member 3 (SLAMF3), also known as LY9, is a cell surface receptor that is expressed on T and B lymphocytes and belongs to the CD150/SLAMF1 receptor family. SLAMF3 was identified through a yeast two-hybrid screening in which SLAMF3 bound to the X-linked lymphoproliferative disease gene product SAP, suggesting that in activated T cells, SLAMF3 signaling can be triggered SAP. Its expression on the cell surface appears to be regulated via its interaction with the clathrin-associated adaptor complex 2 (AP-2). Despite its similarity to SLAMF1 in structure and interactions with SAP, SLAMF3-deficient mice do not exhibit phenotypic characteristics associated with SLAMF1- and SAP-deficient mice, suggesting that SLAMF3 plays other roles in T cell activation.

SLAMF3 Antibody - References

Sayos J, Martin M, Chen A, et al. Cell surface receptors Ly-9 and CD84 recruit the X-linked lymphoproliferative disease gene product SAP. Blood 2001; 97:3867-74.

Del Valle JM, Engel P, and Martin M. The cell surface expression of SAP-binding receptor CD229 is regulated via its interaction with clathrin-associated adaptor complex 2 (AP-2). J. Biol. Chem. 2003; 278:17430-7.

Graham DB, Bell MP, McCausland MM, et al. Ly9 (CD229)-deficient mice exhibit T cell defects yet do not share several phenotypic characteristics associated with SLAM- and SAP-deficient mice. J. Immunol. 2006; 176:291-300.