

SLAMF2 Antibody

Catalog # ASC11304

Specification

SLAMF2 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes WB <u>P09326</u> <u>NP_1769</u>, <u>21361571</u> Human, Mouse, Rat Rabbit Polyclonal IgG SLAMF2 antibody can be used for detection of SLAMF2 by Western blot at 1 - 2 μg/mL.

SLAMF2 Antibody - Additional Information

Gene ID 962 Target/Specificity CD48; Two isoforms of SLAMF2 are known to exist; this antibody will recognize both isoforms. SLAMF2 antibody is predicted to not cross-react with other SLAM protein family members.

Reconstitution & Storage

SLAMF2 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

SLAMF2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

SLAMF2 Antibody - Protein Information

Name CD48

Synonyms BCM1, BLAST1

Function

Glycosylphosphatidylinositol (GPI)-anchored cell surface glycoprotein that interacts via its N-terminal immunoglobulin domain with cell surface receptors including 2B4/CD244 or CD2 to regulate immune cell function and activation (PubMed:27249817, PubMed:12007789). Participates in T-cell signaling transduction by associating with CD2 and efficiently bringing the Src family protein kinase LCK and LAT to the TCR/CD3 complex (PubMed:19494291). In turn, promotes LCK phosphorylation and subsequent activation (PubMed:12007789). Induces the phosphorylation of the cytoplasmic immunoreceptortyrosine switch motifs (ITSMs) of CD244



initiating a series of signaling events that leads to the generation of the immunological synapse and the directed release of cytolytic granules containing perforin and granzymes by Tlymphocytes and NK-cells (PubMed:9841922, PubMed:27249817).

Cellular Location Cell membrane; Lipid-anchor, GPI-anchor. Secreted

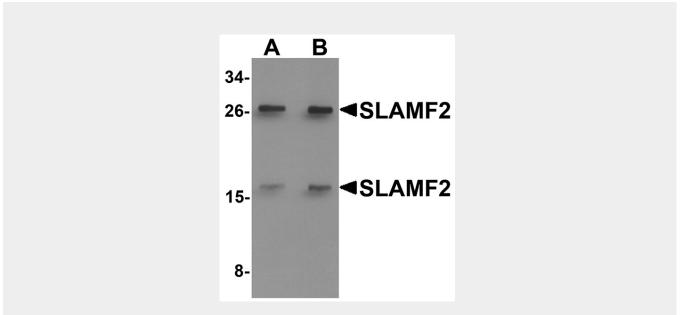
Tissue Location Widely expressed on all hematopoietic cells.

SLAMF2 Antibody - Protocols

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

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

SLAMF2 Antibody - Images



Western blot analysis of SLAMF2 in rat lung tissue lysate with SLAMF2 antibody at (A) 1 and (B) 2 $\mu g/mL$

SLAMF2 Antibody - Background

SLAMF2 Antibody: The signaling lymphocyte-activation molecule family member 2 (SLAMF2), also known as CD48, is a GPI-anchored protein that exists as both a soluble and membrane-associated form and is expressed in almost all leukocyte populations particularly in mitogen-stimulated human lymphocytes. SLAMF2 is a high-affinity ligand for SLAMF4, also known as 2B4, as well as a low-affinity ligand for CD2, and can thus can stimulate cells expressing these receptors. It has been



shown to be an IL-3-induced activating receptor on eosinophils and is likely to be involved in promoting allergic inflammation. SLAMF2 is also thought to be involved in the IL-18/IL-18R signaling cascade in T and natural killer cells to produce interferon-gamma.

SLAMF2 Antibody - References

Smith GM, Biggs J, Norris B, et al. Detection of a soluble form of the leukocyte surface antigen CD48 in plasma and its elevation in patients with lymphoid leukemias and arthritis. J. Clin. Immunol. 1997; 17:502-9.

Sidorenko SP and Clark EA. The dual-function CD150 receptor sub-family: the viral attraction. Nat. Immunol. 4:19-24.

Munitz A, Bachelot I, Eliashar R, et al. CD48 is an allergen and IL-3-induced activation molecule on eosinophils. J. Immunol. 2006; 177:77-83.

Fukushima K, Ikehara Y, and Yamashita K. Functional role played by the

glycosylphosphatidylinositol anchor glycan of CD48 in interleukin-18-induced interferon-gamma production. J. Biol. Chem. 2005; 280:18056-62.