

SLAMF2 Antibody

Catalog # ASC11304

# Specification

# SLAMF2 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes WB, E <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 CD244/2B4 or CD2 to regulate immune cell function and activation (PubMed:<a

href="http://www.uniprot.org/citations/12007789" target="\_blank">12007789</a>, PubMed:<a href="http://www.uniprot.org/citations/19494291" target="\_blank">19494291</a>, PubMed:<a href="http://www.uniprot.org/citations/27249817" target="\_blank">27249817</a>, PubMed:<a href="http://www.uniprot.org/citations/27249817" target="\_blank">9841922</a>, PubMed:<a href="http://www.uniprot.org/citations/9841922" target="\_blank">9841922</a>). 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:<a

href="http://www.uniprot.org/citations/19494291" target="\_blank">19494291</a>). In turn, promotes LCK phosphorylation and subsequent activation (PubMed:<a



href="http://www.uniprot.org/citations/12007789" target="\_blank">12007789</a>). 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 T-lymphocytes and NK- cells (PubMed:<a href="http://www.uniprot.org/citations/27249817">http://www.uniprot.org/citations/27249817"/www.uniprot.org/citations/27249817</a>).

#### **Cellular Location**

Cell membrane; Lipid-anchor, GPI-anchor. Membrane raft. 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.