

SLAMF2 Antibody

Catalog # ASC11304

Product Information

Application WB, E **Primary Accession** P09326

Other Accession NP_1769, 21361571
Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype IgG
Calculated MW 27683
Concentration (mg/ml) 1 mg/mL
Conjugate Unconjugated

Application Notes SLAMF2 antibody can be used for detection of SLAMF2 by Western blot at 1 - 2

□g/mL.

Additional Information

Gene ID 962

Other Names CD48 antigen, B-lymphocyte activation marker BLAST-1, BCM1 surface

antigen, Leukocyte antigen MEM-102, SLAM family member 2, SLAMF2, Signaling lymphocytic activation molecule 2, TCT.1, CD48, CD48, BCM1,

BLAST1

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.

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:12007789, PubMed:19494291, PubMed:27249817,

PubMed:9841922). 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 T-lymphocytes and NK- cells (PubMed:27249817).

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

Tissue Location Widely expressed on all hematopoietic cells.

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.

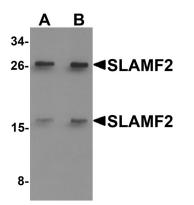
References

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.

Images



Western blot analysis of SLAMF2 in rat lung tissue lysate with SLAMF2 antibody at (A) 1 and (B) 2 µg/mL.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.