

#### CD48 (Pan Leukocyte Marker) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone 5-4.8] Catalog # AH12758

#### **Specification**

### CD48 (Pan Leukocyte Marker) Antibody - With BSA and Azide - Product Information

Application IF, FC
Primary Accession P09326
Other Accession 962, 243564
Reactivity Human
Host Mouse
Clonality Monoclonal

Isotype Mouse / IgG2a, kappa

Calculated MW 45kDa KDa

### CD48 (Pan Leukocyte Marker) Antibody - With BSA and Azide - 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

#### **Application Note**

<span class ="dilution\_IF">IF $\sim$ 1:50 $\sim$ 200/span><br/>br \><span class ="dilution FC">FC $\sim$ 1:10 $\sim$ 50/span>

### Storage

Store at 2 to 8°C. Antibody is stable for 24 months.

#### **Precautions**

CD48 (Pan Leukocyte Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

#### CD48 (Pan Leukocyte Marker) Antibody - With BSA and Azide - 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/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" target=" blank">27249817</a>).

#### **Cellular Location**

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

#### **Tissue Location**

Widely expressed on all hematopoietic cells.

## CD48 (Pan Leukocyte Marker) Antibody - With BSA and Azide - Protocols

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

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

# CD48 (Pan Leukocyte Marker) Antibody - With BSA and Azide - Images

# CD48 (Pan Leukocyte Marker) Antibody - With BSA and Azide - Background

Reacts with human CD48, a 45kDa glycosyl phophatidyl-inositol (GPI)-anchored cell surface protein. CD48 is strongly expressed on lymphocytes and monocytes and weakly on granulocytes but is absent on platelets, fibroblasts, epithelium and endothelium. CD48 is one of the markers for detecting the defects of GPI anchoring structure on the patients with paroxysmal nocturnal hemoglobulinuria (PNH) and serves as a low affinity ligand for CD2.

# CD48 (Pan Leukocyte Marker) Antibody - With BSA and Azide - References

Vaughan HA et al. The isolation of cDNA clones for CD48. Immunogenetics 1991, 33(2):113-117. | Vaughan HA et al. Hu Ly-M3--a human leukocyte antigen. Transplantation 1983, 36(4):446-450