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

Mouse Monoclonal Antibody [Clone 156-4H9]
Catalog # AH12756

Specification

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

Application	**,3,4,**
Primary Accession	P09326
Other Accession	962, 243564
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**Mouse / IgG1, 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

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

Cellular Location
Cell membrane; Lipid-anchor, GPI-anchor. 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
- Immunohistochemistry
- 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 marker 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

Kishimoto T. et al., eds. Leukocyte Typing VI, p509-514, Garland Publishing, Inc, New York and London, 1997. | Yokoyama S et al. Expression of the Blast-1 activation/adhesion molecule and its identification as CD48. J Immunol 1991, 146(7):2192-2200. | Kwong YL et al. Flow cytometric measurement of glycosylphosphatidyl-inositol-linked surface proteins on blood cells of patients with paroxysmal nocturnal hemoglobinuria. Am J Clin Pathol 1994, 102(1):30-35 | Sandrin MS et al. CD48 is a low affinity ligand for human CD2.J Immunol 1993, 151(9):4606-4613. | 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