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Anti-CD48 Picoband Antibody

Catalog # ABO10284

Product Information

Application	WB
Primary Accession	P09326
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for CD48 antigen(CD48) detection. Tested with WB in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/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
Calculated MW	27683
Application Details	Western blot, 0.1-0.5 □g/ml, Human
Subcellular Localization	Cell membrane ; Lipid-anchor, GPI-anchor .
Source	Eukaryota
Protein Name	CD48 antigen
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	E.coli-derived human CD48 recombinant protein (Position: E51-D146). Human CD48 shares 54.7% and 49% amino acid (aa) sequence identity with mouse and rat CD48, respectively.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

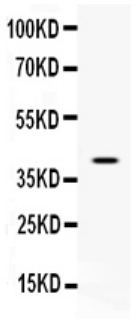
Protein Information

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

CD48 antigen (Cluster of Differentiation 48), also known as B-lymphocyte activation marker (BLAST-1) or signaling lymphocytic activation molecule 2 (SLAMF2), is a protein that in humans is encoded by the CD48 gene. This gene encodes a member of the CD2 subfamily of immunoglobulin-like receptors which includes SLAM (signaling lymphocyte activation molecules) proteins. The encoded protein is found on the surface of lymphocytes and other immune cells, dendritic cells and endothelial cells, and participates in activation and differentiation pathways in these cells. The encoded protein does not have a transmembrane domain, however, but is held at the cell surface by a GPI anchor via a C-terminal domain which maybe cleaved to yield a soluble form of the receptor. Multiple transcript variants encoding different isoforms have been found for this gene.

Images



Western blot analysis of CD48 expression in CEM whole cell lysates (lane 1). CD48 at 39KD was detected using rabbit anti- CD48 Antigen Affinity purified polyclonal antibody (Catalog #ABO10284) at 0.5 □¼g/mL. The blot was developed using chemiluminescence (ECL) method .

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