10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CD48/SLAMF2

Catalog # PVGS1592

Product Information

Primary Accession	P09326
Species	Human
Sequence	Gln27-Ser220
Purity	> 95% as analyzed by SDS-PAGE
Endotoxin Level	
Biological Activity	Immobilized CD244 (Mammalian,C-6His) at 5.0 μg/ml (100 μl/well) can bind CD48/SLAMF2, hFc, Human with EC_{50}=0.653 μg/ml when detected by Mouse Anti Human IgG Fc-HRP.
Expression System	HEK 293
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH_2O or PBS up to 100 μg/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

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 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. CD48 is a member of the CD2 subfamily of the immunoglobulin superfamily (IgSF) which includes SLAM (signaling lymphocyte activation molecules) proteins, such as CD84, CD150, CD229 and CD244. CD48 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. CD48 was the first B-cell-specific cellular differentiation antigen identified in transformed B lymphoblasts.

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.