

## CD48/SLAMF2

Catalog # PVGS1592

# **Specification**

## **CD48/SLAMF2 - Product Information**

Primary Accession
Species
Human

P09326

**Sequence** 

Gln27-Ser220

**Purity** 

> 95% as analyzed by SDS-PAGE

### **Endotoxin Level**

< 1 EU/ µg of protein by gel clotting method

## **Biological Activity**

Immobilized CD244 (Mammalian,C-6His) at 5.0  $\mu$ g/ml (100  $\mu$ l/well) can bind CD48/SLAMF2, hFc, Human with EC<sub>50</sub>=0.653  $\mu$ g/ml when detected by Mouse Anti Human IgG Fc-HRP.

# **Expression System**

**HEK 293** 

Formulation

Lyophilized from a 0.2  $\mu m$  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  $100 \mu g/ml$ .

#### 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.

# CD48/SLAMF2 - 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



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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.

## **CD48/SLAMF2 - 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/SLAMF2 - Protocols

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

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

# CD48/SLAMF2 - Images