

# Human CD48 / SLAMF2 / BCM1 Protein (Fc Tag)

Catalog Number: 10797-H02H



Sino Biological  
Biological Solution Specialist

## General Information

### Gene Name Synonym:

BCM1; BLAST; Blast-1; BLAST1; hCD48; mCD48; MEM-102; SLAMF2

### Protein Construction:

A DNA sequence encoding the human CD48 (NP\_001769.2) (Met1-Ser220) was expressed with the Fc region of human IgG1 at the C-terminus.

**Source:** Human

**Expression Host:** HEK293 Cells

## QC Testing

**Purity:** > 90 % as determined by SDS-PAGE

### Bio Activity:

1. Measured by its binding ability in a functional ELISA.
2. Immobilized human 2B4-His (Cat:10042-H08H), at 10 µg/mL (100 µL/well) can bind human CD48-Fc. The EC<sub>50</sub> of human CD48-Fc is 0.03-0.06µg/mL.

### Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

### Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

**Predicted N terminal:** Gln 27

### Molecular Mass:

The recombinant human CD48/Fc comprises 432 amino acids and has a predicted molecular mass of 49.1 kDa. The apparent molecular mass of the protein is approximately 64.5 kDa in SDS-PAGE under reducing conditions.

### Formulation:

Lyophilized from sterile PBS, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## Usage Guide

### Storage:

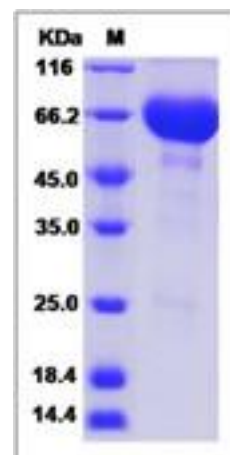
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

Cluster of Differentiation 48 (CD48), also known as SLAMF2, BCM-1 and BLAST-1, is a GPI-linked protein belonging to the CD2 subfamily of immunoglobulin superfamily molecules. CD2 and 2B4 (CD244) are known ligands for CD48. CD48 protein is expressed on most lineage-committed hematopoietic cells but not on hematopoietic stem cells or multipotent hematopoietic progenitors. CD48 protein performs biological functions in a variety of processes including adhesion, pathogen recognition, cellular activation, and cytokine regulation, and emerges as a critical effector molecule in immune responses.

## References

- <li>Messmer B, <em>et al.</em> (2006) CD48 stimulation by 2B4 (CD244)-expressing targets activates human NK cells. J Immunol. 176(8): 4646-50</li><li>Milstein O, <em>et al.</em> (2008) Nanoscale increases in CD2-CD48-mediated intermembrane spacing decrease adhesion and reorganize the immunological synapse. J Biol Chem. 283(49): 34414-22.</li>

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