

Recombinant Human CD48 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50159

Size: 10ug, 100ug

Protein Name: 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) (CD antigen CD48)

Synonym: CD48, BCM1, BLAST1

UniProt ID: P09326

UniProt Link: www.uniprot.org/uniprotkb/P09326/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 243 AA

Molecular Weight: 28 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MCSRGWDSCLALELLLLPLSLLVTSIQGHLVHMTVVSGSNVTLNISESLPENYKQLTWFYTFDQKIVE
WDSRKSKYFESKFGRVRLDPQSGALYISKVQKEDNSTYIMRVLKKTGNEQEWKIKLQVLDPVPKPV
IKIEKIEDMDDNCYKLSCVIPGESVNYTWYGDKRPFKELQNSVLETTLMPHNYSRCYTCQVSNSV
SSKNGTVCLSPCTLARSFGVEWIASWLVTPTILGLLLT

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant 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) (CD antigen CD48) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein 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 immunoreceptor tyrosine 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).

Subcellular Localization: Cell membrane ; Lipid-anchor, GPI-anchor . Membrane raft . Secreted .

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.