

Recombinant Mouse LCP2 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51618

Size: 10ug, 100ug

Protein Name: Lymphocyte cytosolic protein 2 (SH2 domain-containing leukocyte protein of 76 kDa) (SLP-76 tyrosine phosphoprotein) (SLP76)

Synonym: Lcp2

UniProt ID: Q60787

UniProt Link: www.uniprot.org/uniprotkb/Q60787/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 533 AA

Molecular Weight: 60 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MALKNV PFRSEVLAWNSDNLADYFRKLN YRDCEAVKKYHIDGARFLNLTENDIQKFPKLRMP LLSK
LSQDINKNEERRSIFTRK PQIPRFLEETESHEEDDGGWSSFEDDYESPND DDPDGEDDGDYESPNE
EEQALVDDAADYEP PPSNNEEALQSSILPPNSFHNTNSMYIDRPPTGKVSQQPPVPPLRPK PALPPL
PTGRNHSPLSPHPNHEEPSRSGN NKTAKLPAPSIDRSTK PPLDRSLAPLDREPFILGKKP PFSDKP
SAPLGREHL PKIQK PPLPPAMDRHERNERLGPV TTRKPPVPRHGRGPD RRENDEDDVHQRPLPQP
SLPSMSSNTF PPSRSVQPSSKNTFPLAHMPGAFSESNIGFQQSASLP PYFSQGP GNRPPLRSEGRNL
PLPVPNR PQPPSPGEEETPLDEEWVYSYITRPEAEALRKINQDGTFLVRDSSKKTANNPYVLMVLY
KDKVYNIQIRYQ EESQVYLLGTGLRGKEDFLSVSDIIDYFRKMPLLLIDGKNRGSRYQCTLTHAAGCL

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 Lymphocyte cytosolic protein 2 (SH2 domain-containing leukocyte protein of 76 kDa) (SLP-76 tyrosine phosphoprotein) (SLP76) 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: Adapter protein primarily involved in signaling pathways within T-cells, as well as other immune cells such as platelets, mast cells, and natural killer (NK) cells (PubMed:10660534). Plays a crucial role for transducing signal from the T-cell receptor (TCR) after antigen recognition leading to T-cell activation. Mechanistically, once phosphorylated by the kinase ZAP70, mediates interactions with the guanine-nucleotide exchange factor VAV1, the adapter protein NCK and the kinase ITK. In turn, stimulates the activation of PKC-theta/PRKCQ and NF-kappa-B transcriptional activity in response to CD3 and CD28 costimulation. Also plays an essential role in AGER-induced signaling pathways including p38 MAPK and ERK1/2 activation leading to cytokine release and pro-inflammatory responses.

Subcellular Localization: Cytoplasm .

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.