

Recombinant Human LCP2 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50611

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: Q13094

UniProt Link: www.uniprot.org/uniprotkb/Q13094/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 533 AA

Molecular Weight: 60 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MALRNVPFRSEVLGWDPDSLADYFKKLNKYDCEKAVKKYHIDGARFLNLTENDIQKFPKLRVPILSKL
SQEINKNEERRSIFTRKPQVPRFPEETESHEEDNGGWSSFEEDDYESPNDQDGEDDGDYESPNE
EEEAPVEDDADYEPPPSNDEEALQNSILPAKFPNSNSMYIDRPPSGKTPQQPPVPPQRPMAALPP
PPAGRNHSPPLPPQTNHEEPSRSRNHKTAKLPAPSIDRSTKPPLDRSLAPFDREPFTLGKKPPFSDK
PSIPAGRSLGEHLPKIQKPPLPPTTERHERSSPLPGKKPPVPKHGWGPDRRENDEDDVHQRPLPQP
ALLPMSSNTFSPSRSTKPSPMNPLPSSHMPGAFSESNSSFPQSASLPPYFSQGSPSNRPPPIRAEGRNF
PLPLPNKPRPPSPAEENSLNEEWYVSYITRPEAEALRKINQDGTFLVRDSSKKTNTNPYVLMVLYK
DKVYNIQIRYQKESQVYLLGTGLRGKEDFLSVSDIIDYFRKMPLLLIDGKNRGSRYQCTLTHAAGYP

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:11313406, PubMed:33159816). 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 (PubMed:8673706, PubMed:8702662). In turn, stimulates the activation of PKC-theta/PRKCQ and NF-kappa-B transcriptional activity in response to CD3 and CD28 costimulation (PubMed:11313406). 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 (PubMed:33436632).

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.