

Recombinant Human CPNE1 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50213

Size: 10ug, 100ug

Protein Name: Copine-1 (Chromobindin 17) (Copine I)

Synonym: CPNE1, CPN1

UniProt ID: Q99829

UniProt Link: www.uniprot.org/uniprotkb/Q99829/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 537 AA

Molecular Weight: 59 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MAHCVTLVQLSISCDHLIDKDIGSKSDPLCVLLQDVGGGSWAELGRTERVRNCSSPEFSKTLQLEYR
FETVQKLRFGIYDIDNKTPELRDDDFLGGAECSLGQIVSSQVLTPLMLKPGKPAGRGTTITVSAQELK
DNRVVTMEVEARNLDKKDFLGKSDPFLEFFRQGDGKWHLVYRSEVIKNNLNPTWKRFSVPVQHFC
GGNPSTPIQVQCSYDSDGSHDLIGTFHTSLAQLQAVPAEFECIHPEKQQKKKSYKNSGTIRVKICRV
ETEYSFLDYVMGGCQINFVTGVDFGTSGNDPSSPDSLHYLSPTGVNEYLMALWSVGSVVQDYDSD
KLFPAFGFGAQVPPDWQVSHEFALNFNPSNPYCAGIQGIVDAYRQALPQVRLYGPTNFAPIINHVAR
FAAQAAHQGTASQYFMLLLTLDGAVTDVEATREAVVRASNLPM SVIIVGVGGADFEAMEQLDADGG
PLHTRSGQAAARDIVQFVPYRRFQNA PREALAQTVLAEVPTQLVSYFRAQGWAPLKPLPPSAKDPA
QAPQA

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 Copine-1 (Chromobindin 17) (Copine I) 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: Calcium-dependent phospholipid-binding protein that plays a role in calcium-mediated intracellular processes (PubMed:14674885). Involved in the TNF receptor signaling pathway in a calcium-dependent manner (PubMed:14674885). Exhibits calcium-dependent phospholipid binding properties (PubMed:19539605, PubMed:9430674). Plays a role in neuronal progenitor cell differentiation; induces neurite outgrowth via a AKT-dependent signaling cascade and calcium-independent manner (PubMed:23263657, PubMed:25450385). May recruit target proteins to the cell membrane in a calcium-dependent manner (PubMed:12522145). May function in membrane trafficking (PubMed:9430674). Involved in TNF-induced NF-kappa-B transcriptional repression by inducing endoprotease processing of the transcription factor NF-kappa-B p65/RELA subunit (PubMed:18212740). Also induces endoprotease processing of NF-kappa-B p50/NFKB1, p52/NFKB2, RELB and REL (PubMed:18212740).

Subcellular Localization: Nucleus . Cytoplasm . Cell membrane . Note=Translocates to the cell membrane in a calcium-dependent manner (PubMed:21087455, PubMed:25450385).

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.