

Recombinant Human CLPB Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50206

Size: 10ug, 100ug

Protein Name: Mitochondrial disaggregase (EC 3.6.1.-) (Suppressor of potassium transport defect 3) [Cleaved into: Mitochondrial disaggregase, cleaved form]

Synonym: CLPB, SKD3

UniProt ID: Q9H078

UniProt Link: www.uniprot.org/uniprotkb/Q9H078/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 707 AA

Molecular Weight: 79 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MLGSLVLRKALAPRLLLRLRSPTLRGHGGASGRNVTTGSLGEPQWLRVATGGRPGTSPALFSGR
GAATGGRQGGRFDTKCLAAATWGRLPGPEETLPQQDSWNGVPSRAGLGMCAALVVCYSKS
PSNKDAALLEAARANNMQEVSRLSEGADVNAKHRLGWTALMVAAINRNNSVVQVLLAAGADPNLG
DDFSSVYKTAKEQGIHSLEDGGQDGASRHITNQWTSALFRRWLGLPAGVLITREDDFNNRLNNRA
SFKGCTALHYAVLADDYRTVKELLDGGANPLQRNEMGHTPLDYAREGEVMKLLRTSEAKYQEKQR
KREAEEERRRFPLEQRLKEHIIGQESAIATVGAAIRRKENGWYDEEHPLVFLFLGSSGIGKTELAKQTA
KYMHKDAKKGFIRLDMSEFQERHEVAKFIGSPPGYVGHEEGGQLTKKLKQCPNAVVLFDVDAHP
DVLTIMLQLFDEGRLTDGKGKTIDCKDAIFIMTSNVASDEIAQHALQLRQEALMSRNRIAENLGDVQI
SDKITISKNFKENVIRPILKAHFRDEFLLGRINEIVYFLPFCHSELIQLVNKELNFWAKRAKQRHNITLLW
DREVADVLVDGYNVHYGARSIKHEVERRVQNQLAAAYEQDLLPGGCTLRITVEDSDKQLLKSPPEPS
PQAEKRLPKLRLEIDKDSKTRRLDIRAPLHPEKVCNTI

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 Mitochondrial disaggregase (EC 3.6.1.-) (Suppressor of potassium transport defect 3) [Cleaved into: Mitochondrial disaggregase, cleaved form] 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: Functions as a regulatory ATPase and participates in secretion/protein trafficking process. Has ATP-dependent protein disaggregase activity and is required to maintain the solubility of key mitochondrial proteins (PubMed:32573439, PubMed:34115842, PubMed:35247700, PubMed:36170828, PubMed:36745679). Involved in mitochondrial-mediated antiviral innate immunity, activates RIG-I-mediated signal transduction and production of IFNB1 and pro-inflammatory cytokine IL6 (PubMed:31522117). Plays a role in granulocyte differentiation (PubMed:34115842).

Subcellular Localization: Mitochondrion intermembrane space .

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.