

Recombinant Rat CPIN1 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52655

Size: 10ug, 100ug

Protein Name: Anamorsin (Cytokine-induced apoptosis inhibitor 1) (Fe-S cluster assembly protein DRE2 homolog)

Synonym: Ciapin1

UniProt ID: Q5XID1

UniProt Link: www.uniprot.org/uniprotkb/Q5XID1/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 309 AA

Molecular Weight: 33 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MAEFGISPGQLVAVFCDKSSSEEALKKLVGRVQGLTGSEGQVFVENITQLLQSAHKESSFDVILSGIV
PGSTSLHSPEALADMARILRPGGCLFLKEPVETTGVNNDKIKTASKLCSALTLSGLVEIKELQREALSP
EEAQSMQEHLGYHSDSLLSVHVTGKKPNFEVGGSSQLKLLHKKSSSVKPVVDPATAKLWTLSSANDM
EDDSMDLIDSELLDPEDLKKPDPAKAPSCGEGKKRKACKNCTCGLAELEEKEQSKAQSSQPKS
ACGNCYLGDAFRCANCPYLGMPAFKPGEQVLLSSSNLQDA

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 Anamorsin (Cytokine-induced apoptosis inhibitor 1) (Fe-S cluster assembly protein DRE2 homolog) 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: Component of the cytosolic iron-sulfur (Fe-S) protein assembly (CIA) machinery required for the maturation of extramitochondrial Fe-S proteins. Part of an electron transfer chain functioning in an early step of cytosolic Fe-S biogenesis, facilitating the de novo assembly of a [4Fe-4S] cluster on the scaffold complex NUBP1-NUBP2. Electrons are transferred to CIAPIN1 from NADPH via the FAD- and FMN-containing protein NDOR1. NDOR1-CIAPIN1 are also required for the assembly of the diferric tyrosyl radical cofactor of ribonucleotide reductase (RNR), probably by providing electrons for reduction during radical cofactor maturation in the catalytic small subunit. Has anti-apoptotic effects in the cell. Involved in negative control of cell death upon cytokine withdrawal. Promotes development of hematopoietic cells.

Subcellular Localization: Cytoplasm . Nucleus . 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.