

Recombinant Rat PDCD4 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52581

Size: 10ug, 100ug

Protein Name: Programmed cell death protein 4 (Death up-regulated gene protein)

Synonym: Pdcd4, Dug

UniProt ID: Q9JID1

UniProt Link: www.uniprot.org/uniprotkb/Q9JID1/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 469 AA

Molecular Weight: 52 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MDVENEQILNVNPTDPDNLSDSLFSGDEENAGTEEIKNEINGNWISASTINEARINAKAKRRLRKNSS
RDSGRGDSVSDNGSEAVRSGVAVPTSPKGRLLDRRSRSGKGRGLPKKGGAGGKGVWGTPGQVY
DVEEVDVKDPNYDDQENCYETVVLPLDETAFEKTLTPIIQEYFEHGDNEVAEMLRDLNLGEMKS
GVPVLAVSLALEGKASHREMTSKLLSDLCGTVMSTNDVEKSFDKLLKDLPELALDTPRAPQLVGQFI
ARAVGDGILCNTYIDSYKGTVDVCVQARAALDKATVLLSMSKGGKRKDSVWGSGGGQQPVNHLVKEI
DMLLKEYLLSGDMSEAEHCLKELEVPHFHHELVEAIVMVLESTGESAFKMMLDLLKSLWKSSTITID
QMKRGYERIYNEIPDINLDVPHSYSVLERFVEECFQAGIISKQLRDLCP SRGRKRFVSEGDGGRLKPE
SY

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 Programmed cell death protein 4 (Death up-regulated gene protein) 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: Inhibits translation initiation and cap-dependent translation. May exert its function by hindering the interaction between EIF4A1 and EIF4G. Inhibits the helicase activity of EIF4A. Modulates the activation of JUN kinase. Down-regulates the expression of MAP4K1, thus inhibiting events important in driving invasion, namely, MAPK85 activation and consequent JUN-dependent transcription. May play a role in apoptosis. Tumor suppressor. Inhibits tumor promoter-induced neoplastic transformation. Binds RNA (By similarity).

Subcellular Localization: Nucleus . Cytoplasm . Note=Shuttles between the nucleus and cytoplasm. Predominantly nuclear under normal growth conditions, and when phosphorylated at Ser-457 (By similarity).

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.