

Recombinant human DCPS protein

Catalog Number: ATGP1162

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-337aa

UniProt No.

Q96C86

NCBI Accession No.

NP_054745

Alternative Names

Scavenger mRNA-decapping enzyme DcpS, DCS1, HINT5

PRODUCT SPECIFICATION

Molecular Weight

40.7 kDa (357aa) confirmed by MALDI-TOF

Concentration

0.5mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 20% glycerol, 1mM DTT

Purity

> 90% by SDS-PAGE

Tag

His-Tag

Application

SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

DCPS, also known as scavenger mRNA-decapping enzyme, is belongs to the HIT family. It is necessary for the complete degradation of mRNAs, both in normal mRNA turnover and in nonsense-mediated mRNA decay. A scavenger decapping enzyme, DcpS was shown to hydrolyze the residual m7GpppN cap structure after the complete 3'-5' degradation of the mRNA by the exosome. DcpS releases m7GMP and is unable to cleave cap structures attached to a long RNA chain. Recombinant human DCPS protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography.

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Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH> MADAAPQLGK RKRELDVEEA HAASTEEKEA GVGNGTCAPV RLPFSGFRLQ
KVLRESARDK IIFLHGKVNE ASGDGDGEDA VVILEKTPFQ VEQVAQLLTG SPELQLQFSN DIYSTYHLFP PRQLNDVKTT
VVYPATEKHL QKYLRQDLRL IRETGDDYRN ITLPHLESQS LSIQWVYNIL DKKAEADRIV FENPDPSDGF VLIPDLKWNQ
QQLDDLZIA ICHRRGIRSL RDLTPEHLPL LRNILHQGQE AILQRYRMKG DHLRVYLHYL PSYYHLHVHF TALGFEAPGS
GVERAHLAE VIENLECDPR HYQQRILTFA LRADDPLLKL LQEAQQS

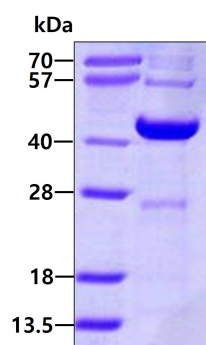
General References

Liu H., et al. (2002) EMBO J. 21:4699-4708

Kwasnicka D.A., et al. (2003) J. Biol. Chem. 278:39051-39058

DATA

SDS-PAGE



3 μ g by SDS-PAGE under reducing condition and visualized by coomassie blue stain.