Recombinant human eIF-4A3/EIF4A3 protein

Catalog Number: ATGP1334

PRODUCT INFORMATION

Expression system
E.coli

Domain
1-411aa

UniProt No.
P38919

NCBI Accession No.
NP_055555

Alternative Names
Nuclear matrix protein 265, NMP 265, hNMP 265, Fal1, Eukaryotic translation initiation factor 4A3, eukaryotic translation initiation factor 4A isoform 3, Eukaryotic initiation factor 4A-like NUK-34, Eukaryotic initiation factor 4A-III, EIF4AIII, DEAD box protein 48, DEAD (Asp-Glu-Ala-Asp) box polypeptide 48, DDX48, ATP-dependent RNA helicase eIF4A-3, ATP-dependent RNA helicase DDX48

PRODUCT SPECIFICATION

Molecular Weight
49.4 kDa (435aa) confirmed by MALDI-TOF

Concentration
0.5mg/ml (determined by Bradford assay)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 2mM DTT, 30% glycerol, 200mM NaCl

Purity
> 95% 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
EIF4A3 (Eukaryotic initiation factor 4A-III) belongs to the DEAD box helicase family and eIF4A subfamily. DEAD box proteins, characterized by the conserved motif Asp-Glu-Ala-Asp (DEAD), are putative RNA helicases. They are implicated in a number of cellular processes involving alteration of RNA secondary structure, such as

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translation initiation, nuclear and mitochondrial splicing, and ribosome and spliceosome assembly. EIF4A3 is a component of a splicing-dependent multiprotein exon junction complex (EJC) deposited at splice junction on mRNAs. Recombinant human EIF4A3 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

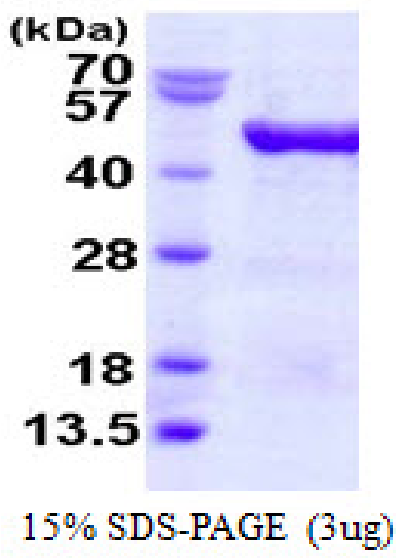
MGSSHHHHHH SSGLVPRGSH MGSHMATTAT MATSGSARKR LLKEEDMTKV EFETSEEVDV TPTFDTMGLR EDLLRGIYAY GFEKPSAIQQ RAIKQIIKGR DVIAQSQSGT GKTATFSISV LQCLDIQVRE TQALILAPTR ELAVQIQKGL LALGDYMNVQ CHACIGGTNV GEDIRKLDYG QHVVAGTPGR VFDMIRRRSL RTRAIKMLVL DEADEMLNKG FKEQIYDVYR YLPPATQVVL ISATLPHEIL EMTNKFMTDP IRILVKRDEL TLEGIKQFFV AVEREEWKFD TLCDLYDTLT ITQAVIFCNT KRKVDWLTEK MREANFTVSS MHGDMPQKER ESIMKEFRSG ASRVLISTDV WARGLDVPQV SLIINYDLPN NRELYIHRIG RSGRYGRKGV AINFVKNDDI RILRDIEQYY STQIDEMPMN VADLI

General References

Chan C.C., et al. (2004) RNA 10:200-209
Li Q, et al. (1999). Mol. Cell. Biol. 19 (11): 7336-46.

DATA

SDS-PAGE



15% SDS-PAGE (3ug)

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