

Recombinant human eIF-3 alpha/EIF3J protein

Catalog Number: ATGP1272

PRODUCT INFORMATION

Expression system

E.coli

Domain

70-258aa

UniProt No.

O75822

NCBI Accession No.

NP_003749

Alternative Names

Eukaryotic translation initiation factor 3 subunit J, eIF3-alpha, eIF3-p35, EIF3S1, Eukaryotic translation initiation factor 3 subunit 1 alpha

PRODUCT SPECIFICATION

Molecular Weight

24 kDa (210aa) confirmed by MALDI-TOF (Molecular weight on SDS-PAGE will appear higher)

Concentration

0.5mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 2mM DTT, 10% glycerol, 200mM NaCl

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

EIF3J (Eukaryotic translation initiation factor 3 subunit J) belongs to the EIF-3 subunit J family. EIF3 plays a central role in binding of initiator methionyl-tRNA and mRNA to the 40S ribosomal subunit to form the 40S initiation complex. EIF3J binds to the aminoacyl (A) site and mRNA entry channel of the 40S subunit, placing EIF3J directly in the ribosomal decoding center. EIF3J also interacts with eIF1A and reduces 40S subunit affinity for mRNA. A high affinity for mRNA is restored upon recruitment of initiator tRNA, even though EIF3J remains in the mRNA-

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binding cleft in the presence of tRNA. Recombinant human EIF3J protein, fused to His-tag at N-terminus, was expressed in *E. coli* and purified by using conventional chromatography techniques.

Amino acid Sequence

MGSSHHHHHH SGLVPRGSH MKISEKKKIA EKIKEKERQQ KKRQEEIKR LEEPEEPKVL TPEEQLADKL RLKKLQEEESD
LELAKETFGV NNAVYGIDAM NPSSRDDFTE FGKLLKDKIT QYEKSLYYAS FLEVLVRDVC ISLEIDDLKK ITNSLTVLCS
EKQKQEKQSK AKKKKKGVP GGGLKATMKD DLADYGGYDG GYVQDYEDFM

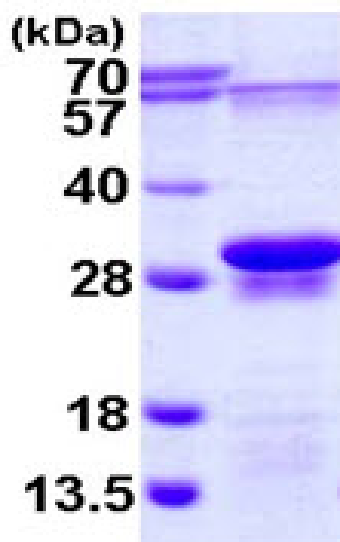
General References

Fraser CS, et al. (2007) *Mol Cell*. 26(6):811-9.

Block K.L., et al. (1998) *J. Biol. Chem.* 273:31901-31908

DATA

SDS-PAGE



15% SDS-PAGE (3ug)

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