Datasheet for ABIN3088011

EIF4ENIF1 Protein (AA 1-985) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	EIF4ENIF1
Protein Characteristics:	AA 1-985
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This EIF4ENIF1 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MDRRSMGETE SGDAFLDLKK PPASKCPHRY TKEELLDIKE LPHSKQRPSC LSEKYDSDGV WDPEKWHASL YPASGRSSPV ESLKKELDTD RPSLVRRIVD PRERVKEDDL DVVLSPQRRS FGGGCHVTAA VSSRRSGSPL EKDSDGLRLL GGRRIGSGRI ISARTFEKDH RLSDKDLRDL RDRDRERDFK DKRFRREFGD SKRVFGERRR NDSYTEEEPE WFSAGPTSQS ETIELTGFDD KILEEDHKGR KRTRRRTASV KEGIVECNGG VAEEDEVEVI LAQEPAADQE VPRDAVLPEQ SPGDFDFNEF FNLDKVPCLA SMIEDVLGEG SVSASRFSRW FSNPSRSGSR SSSLGSTPHE ELERLAGLEQ AILSPGQNSG NYFAPIPLED HAENKVDILE MLQKAKVDLK PLLSSLSANK EKLKESSHSG VVLSVEEVEA GLKGLKVDQQ VKNSTPFMAE HLEETLSAVT NNRQLKKDGD MTAFNKLVST MKASGTLPSQ PKVSRNLESH LMSPAEIPGQ PVPKNILQEL LGQPVQRPAS SNLLSGLMGS LEPTTSLLGQ RAPSPPLSQV FQTRAASADY LRPRIPSPIG FTPGPQQLLG DPFQGMRKPM SPITAQMSQL ELQQAALEGL ALPHDLAVQA ANFYQPGFGK PQVDRTRDGF

RNRQQRVTKS PAPVHRGNSS SPAPAASITS MLSPSFTPTS VIRKMYESKE KSKEEPASGK AALGDSKEDT QKASEENLLS SSSVPSADRD SSPTTNSKLS ALQRSSCSTP LSQANRYTKE QDYRPKATGR KTPTLASPVP TTPFLRPVHQ VPLVPHVPMV RPAHQLHPGL VQRMLAQGVH PQHLPSLLQT GVLPPGMDLS HLQGISGPIL GQPFYPLPAA SHPLLNPRPG TPLHLAMVQQ QLQRSVLHPP GSGSHAAAVS VQTTPQNVPS RSGLPHMHSQ LEHRPSQRSS SPVGLAKWFG SDVLQQPLPS MPAKVISVDE LEYRQ

Sequence without tag. The proposed Strep-Tag is based on experience s with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.

Characteristics:

Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified in one-step affinity chromatography
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a **made-to-order protein** and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

The big advantage of ordering our **made-to-order proteins** in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured against its specific reference buffer.

Product Details

- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	EIF4ENIF1
Alternative Name:	EIF4ENIF1 (EIF4ENIF1 Products)
Background:	Eukaryotic translation initiation factor 4E transporter (4E-T) (eIF4E transporter) (Eukaryotic translation initiation factor 4E nuclear import factor 1),FUNCTION: EIF4E-binding protein that regulates translation and stability of mRNAs in processing bodies (P-bodies) (PubMed:16157702, PubMed:24335285, PubMed:27342281, PubMed:32354837). Plays a key role in P-bodies to coordinate the storage of translationally inactive mRNAs in the cytoplasm and prevent their degradation (PubMed:24335285, PubMed:32354837). Acts as a binding platform for multiple RNA-binding proteins: promotes deadenylation of mRNAs via its interaction with the CCR4-NOT complex, and blocks decapping via interaction with eIF4E (EIF4E and EIF4E2), thereby protecting deadenylated and repressed mRNAs from degradation (PubMed:27342281, PubMed:32354837). Component of a multiprotein complex that sequesters and represses translation of proneurogenic factors during neurogenesis (By similarity). Promotes miRNA-mediated translational repression (PubMed:24335285, PubMed:27342281, PubMed:28487484). Required for the formation of P-bodies (PubMed:16157702, PubMed:22966201, PubMed:27342281, PubMed:32354837). Involved in mRNA translational repression mediated by the miRNA effector TNRC6B by protecting TNRC6B-targeted mRNAs from decapping and subsequent decay (PubMed:32354837). Also acts as a nucleoplasmic shuttling protein, which mediates the nuclear import of EIF4E and DDX6 by a piggy-back mechanism (PubMed:10856257, PubMed:28216671). {ECO:0000250|UniProtKB:Q9EST3, ECO:0000269|PubMed:10856257, ECO:0000269|PubMed:16157702, ECO:0000269|PubMed:22966201, ECO:0000269|PubMed:24335285, ECO:0000269|PubMed:27342281, ECO:0000269|PubMed:28216671, ECO:0000269|PubMed:28487484, ECO:0000269|PubMed:32354837}.

Target Details

Molecular Weight:	108.2 kDa
UniProt:	Q9NRA8

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Comment:	ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications. During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months