

# Datasheet for ABIN3137234 **EIF4ENIF1 Protein (AA 1-983) (Strep Tag)**



#### Go to Product page

| $\sim$ |            |     |     |
|--------|------------|-----|-----|
| ( )\   | <b>/</b> e | rVI | iew |

| Quantity:                     | 250 μg   |
|-------------------------------|--|
| Target:                       | EIF4ENIF1  |
| Protein Characteristics:      | AA 1-983   |
| Origin:                       | Mouse  |
| 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)       |

| Brand:    | AliCE®  |
|-----------|---|
| Sequence: | MEKSVAETEN GDAFLELKKL PTSKSPHRYT KEELLDIKER PYSKQRPSCL SEKYDSDGVW |
|           | DPEKWHASLY PASGRSSPVE SLKKESESDR PSLVRRIADP RERVKEDDLD VVLSPQRRSF |
|           | GGGCHVTAAV SSRRSGSPLE KDSDGLRLLG GRRIGSGRII SARAFEKDHR LSDKDLRDLR |
|           | DRDRERDYKD KRFRREFGDS KRVFGERRRN DSYTEEEPEW FSAGPTSQSE TIELTGFDDK |
|           | ILEEDHKGRK RTRRRTASVK EGIVECNGGV AEEDEVEVIL AQEPSADQEV PRDVILPEQS |
|           | PGEFDFNEFF NLDKVPCLAS MIEDVLGEGS VSASRFSRWF SNPSRSGSRS SSLGSTPHEE |
|           | LERLAGLEQA VLSPGQNSGN YFAPIPSEDH AENKVDILEM LQKAKVDLKP LLSSLSANKE |
|           | KLKESSHSGV VLSVEEVEAG LKGLKVDQQM KNSTPFMAEH LEETLSAASS NRQLKKDGDM |
|           | TAFNKLVNTM KASGTLPTQP KVSRNVESHL LAPAEIPGQP VSKNILQELL GQPVQRPASS |
|           | NLLSGLMGSL EATASLLSQR APSPPMSQVF RTQAASADYL HPRIPSPIGF PSGPQQLLGD |
|           | PFQGMRKPMS PVSAQMSQLE LQQAALEGLA LPHDLAVQTA PFYQPGFSKP QVDRTRDGLR |

NRQQRMSKSP APMHGGNSSS PAPAASITSM LSPSFTPTSV IRKMYESREK TKEEMAPGMV VPGDGKEDTQ KTSEENLLSS NPIPNTDQDS STTNPKLSTL QRSSCSTPLS QTSRYTKEQD YRPKTAGRKT PTLASPVPGT PFLRPTHQVP LVPHVPIVRP AHQLHPGLVQ RLIAQGVHPQ HLPSLLQAGV LPPGIDMAPL QGLSGPLLGQ PLYPLVSAAS HPLLNPRPGT PLHLAVMQQQ LQRSVLHPPG SSSQAAAISV QTPQNVPSRS GMPHMHSQLE HRTSQRSSSP VGLAKWFGSD VLQQPLPSMP TKVISVDELE YRQ

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 posttranslational 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.

| 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   |  |  |
|---|--|--|--|
| Application Details                               |  |  |  |
| UniProt:  | Q9EST3   |  |  |
| Molecular Weight:                                 | 108.0 kDa  |  |  |
| Alternative Name:  Background:  Molecular Weight: | Eukaryotic translation initiation factor 4E transporter (4E-T) (elF4E transporter) (CD40 ligand-activated specific transcript 4) (Eukaryotic translation initiation factor 4E nuclear import factor 1),FUNCTION: ElF4E-binding protein that regulates translation and stability of mRNAs in processing bodies (P-bodies) (PubMed:25456498). Plays a key role in P-bodies to coordinate the storage of translationally inactive mRNAs in the cytoplasm and prevent their degradation (By similarity). 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 elF4E (ElF4E and ElF4E2), thereby protecting deadenylated and repressed mRNAs from degradation (By similarity). Component of a multiprotein complex that sequesters and represses translation of proneurogenic factors during neurogenesis (PubMed:25456498). Promotes miRNA-mediated translational repression (By similarity). Involved in mRNA translational repression mediated by the miRNA effector TNRC6B by protecting TNRC6B-targeted mRNAs from decapping and subsequent decay (By similarity). Required for the formation of P-bodies (By similarity). Also acts as a nucleoplasmic shuttling protein, which mediates the nuclear import of ElF4E and DDX6 by a piggy-back mechanism (By similarity). {ECO:0000250 UniProtKB:Q9NRA8, ECO:0000269 PubMed:25456498}. |  |  |
| Target:   | EIF4ENIF1  |  |  |
| Target Details                                    |  |  |  |
| Grade:  | custom-made  |  |  |
| Purity:   | > 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).   |  |  |
| Purification:                                     | One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).   |  |  |
|   | We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.  |  |  |

## **Application Details**

Expiry Date:

| Application Details |   |
|---------------------|---|
|                     | 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.   |
|                     |   |

12 months