

## Datasheet for ABIN3135517

# TTF1 Protein (AA 1-859) (Strep Tag)



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| Quantity:                     | 250 μg                                        |
|-------------------------------|-----------------------------------------------|
| Target:                       | TTF1                                          |
| Protein Characteristics:      | AA 1-859                                      |
| Origin:                       | Mouse                                         |
| Source:                       | Cell-free protein synthesis (CFPS)            |
| Protein Type:                 | Recombinant                                   |
| Purification tag / Conjugate: | This TTF1 protein is labelled with Strep Tag. |
| Application:                  | SDS-PAGE (SDS), Western Blotting (WB), ELISA  |

| Brand:    | AliCE®                                                            |
|-----------|-------------------------------------------------------------------|
| Sequence: | MKGGTSKFKT HTETLYKKKK WSSVSEKRPQ KCPSQCLESK QPQVSVLGKR RRASQTPAQE |
|           | TLESEWPQKA KRKKRRREPQ TPAQETLESE WPQKAKKKKR RGEPQTPTQE SLESEQPPVS |
|           | LLGKRRRESQ TPAQENSESE QPRKAKRRRK KRKGSQQPTS SLLKTPETFL KAKKTTSAHK |
|           | KKKNSVLEVD METGIILVDK ENMENLLETS RKDVDIVYVD MSKGQRSAKV RETGELPAAK |
|           | PQEHGCRELL GDVRSRKKQK HLQKVAPWDV VQGSQPESIS LPPSEPLSSE DLEGKSTEAA |
|           | VFCKKKSKKN VFRSQELEPI PDSLDDSETI SERLDSTHHG GAVGAGEECE STKESHSIKK |
|           | KSKKKKHKSV ALATSSDSAS VTDSKAKNAL VDSSEGSGAV REEDVDHRPA EAEAQACSTE |
|           | KHREAMQRLE PTHEEESNSE SASNSAARHI SEDRRESDDS DVDLGSAVRQ LREFIPDIQE |
|           | RAATTIRRMY RDDLGRFKEF KAQGVAIRFG KFSAKENKQI EKNVQDFLSL TGIESADKLL |
|           | YTDRYPEEKT LITNLKRKHA FRLHIGKGIA RPWKLVYYRA KKIFDVNNYK GRYNEEDTKK |
|           | LKAYHSLHGN DWKKIGAMVA RSSLSVALKF SQIGGTRNQG AWSKAETQRL IKAVEDVILK |

KMSPQELREL DSKLQEDPEG RLSIVREKLY KGISWVEVEA RVETRNWMQC KSKWTEILTK RMTHGGFVYR GVNALQAKIT LIERLYELNV NDANEIDWED LASAIGDVPP PFVQAKFYKL KAACVPFWQK KTFPEIIDYL YKNSLPLLKE KLDKKMKKKD GQIQTPAAPK QDFLFKDIFH CDDDSDEGSP EEPSASDVQ

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

# **Product Details** 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: TTF1 Alternative Name: Ttf1 (TTF1 Products) Background: Transcription termination factor 1 (TTF-1) (RNA polymerase I termination factor) (Transcription termination factor I) (TTF-I) (mTFF-I), FUNCTION: Multifunctional nucleolar protein that terminates ribosomal gene transcription, mediates replication fork arrest and regulates RNA polymerase I transcription on chromatin (PubMed:7720715, PubMed:9267035, PubMed:15292447, PubMed:9049305). Plays a dual role in rDNA regulation, being involved in both activation and silencing of rDNA transcription (PubMed:15292447, PubMed:20513429). Interaction with BAZ2A/TIP5 recovers DNA-binding activity (PubMed:15292447). {ECO:0000269|PubMed:15292447, ECO:0000269|PubMed:20513429, ECO:0000269|PubMed:7720715, ECO:0000269|PubMed:9049305, ECO:0000269|PubMed:9267035}. Molecular Weight: 97.7 kDa UniProt: Q62187 Pathways: Thyroid Hormone Synthesis, Regulation of Systemic Arterial Blood Pressure by Hormones, Feeding Behaviour Application Details In addition to the applications listed above we expect the protein to work for functional studies **Application Notes:** as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

modifications.

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Comment:

## **Application Details**

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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 <b>Might differ depending on protein.</b> |  |
| Handling Advice: | Avoid repeated freeze-thaw cycles.                                                                                                                             |  |
| Storage:         | -80 °C                                                                                                                                                         |  |
| Storage Comment: | Store at -80°C.                                                                                                                                                |  |
| Expiry Date:     | 12 months                                                                                                                                                      |  |