

# Datasheet for ABIN3074036

# **THUMPD3 Protein (AA 1-507) (Strep Tag)**



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| Quantity:                     | 250 μg   |
|-------------------------------|--|
| Target:                       | THUMPD3  |
| Protein Characteristics:      | AA 1-507   |
| Origin:                       | Human  |
| Source:                       | Cell-free protein synthesis (CFPS)               |
| Protein Type:                 | Recombinant                                      |
| Purification tag / Conjugate: | This THUMPD3 protein is labelled with Strep Tag. |
| Application:                  | ELISA, Western Blotting (WB), SDS-PAGE (SDS)     |

# **Product Details**

| AliCE®  |
|---|
| , more  |
| MCDIEEATNQ LLDVNLHENQ KSVQVTESDL GSESELLVTI GATVPTGFEQ TAADEVREKL                           |
| GSSCKISRDR GKIYFVISVE SLAQVHCLRS VDNLFVVVQE FQDYQFKQTK EEVLKDFEDL                           |
| AGKLPWSNPL KVWKINASFK KKKAKRKKIN QNSSKEKINN GQEVKIDQRN VKKEFTSHAL                           |
| DSHILDYYEN PAIKEDVSTL IGDDLASCKD ETDESSKEET EPQVLKFRVT CNRAGEKHCF                           |
| TSNEAARDFG GAVQDYFKWK ADMTNFDVEV LLNIHDNEVI VGIALTEESL HRRNITHFGP                           |
| TTLRSTLAYG MLRLCDPLPY DIIVDPMCGT GAIPIEGATE WSDCFHIAGD NNPLAVNRAA                           |
| NNIASLLTKS QIKEGKPSWG LPIDAVQWDI CNLPLRTGSV DIIVTDLPFG KRMGSKKRNW                           |
| NLYPACLREM SRVCTPTTGR AVLLTQDTKC FTKALSGMRH VWRKVDTVWV NVGGLRAAVY                           |
| VLIRTPQAFV HPSEQDGERG TLWQCKE   |
| 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.

| 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:             | THUMPD3  |  |
|---------------------|--|--|
| Alternative Name:   | THUMPD3 (THUMPD3 Products)   |  |
| Background:         | TRNA (guanine(6)-N2)-methyltransferase THUMP3 (EC 2.1.1.256) (THUMP domain-containing protein 3),FUNCTION: Methyltransferase which catalyzes the formation of N(2)-methylguanosine at position 6 in a broad range of tRNA substrates containing the characteristic 3'-CCA terminus of mature tRNAs (PubMed:34669960). Also catalyzes the formation of N(2)-methylguanosine at position 7 of tRNA(Trp) (PubMed:34669960). Requires the methyltransferase adapter protein TRM112 for tRNA methyltransferase activity (PubMed:34669960). {ECO:0000269 PubMed:34669960}. |  |
| Molecular Weight:   | 57.0 kDa   |  |
| UniProt:            | Q9BV44   |  |
| 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

| Handling Advice: | Avoid repeated freeze-thaw cycles. |
|------------------|------------------------------------|
| Storage:         | -80 °C                             |
| Storage Comment: | Store at -80°C.                    |
| Expiry Date:     | 12 months                          |