

# Datasheet for ABIN7544405 **THG1L Protein (AA 1-298) (His tag)**



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| Quantity:                     | 1 mg   |
|-------------------------------|--|
| Target:                       | THG1L  |
| Protein Characteristics:      | AA 1-298                                     |
| Origin:                       | Human  |
| Source:                       | HEK-293 Cells                                |
| Protein Type:                 | Recombinant                                  |
| Purification tag / Conjugate: | This THG1L protein is labelled with His tag. |

#### **Product Details**

| Purpose:         | Custom-made recombinant THG1L Protein expressed in mammalian cells.                             |
|------------------|---|
| Sequence:        | MWGACKVKVH DSLATISITL RRYLRLGATM AKSKFEYVRD FEADDTCLAH CWVVVRLDGR                               |
|                  | NFHRFAEKHN FAKPNDSRAL QLMTKCAQTV MEELEDIVIA YGQSDEYSFV FKRKTNWFKR                               |
|                  | RASKFMTHVA SQFASSYVFY WRDYFEDQPL LYPPGFDGRV VVYPSNQTLK DYLSWRQADC                               |
|                  | HINNLYNTVF WALIQQSGLT PVQAQGRLQG TLAADKNEIL FSEFNINYNN ELPMYRKGTV                               |
|                  | LIWQKVDEVM TKEIKLPTEM EGKKMAVTRT RTKPVPLHCD IIGDAFWKEH PEILDEDS <b>Sequence</b>                 |
|                  | without tag. The proposed Purification-Tag is based on experiences 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.  |
| Specificity:     | If you are looking for a specific domain and are interested in a partial protein or a different |
|                  | isoform, please contact us regarding an individual offer.                                       |
| Characteristics: | Key Benefits:   |
|                  |   |

- · Made to order protein from design to production by highly experienced protein experts.
- · Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- 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.

If you are not interested in a full length protein, please contact us for individual protein fragments.

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.

Purity:

> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

Grade:

custom-made

### **Target Details**

| Target:           | THG1L   |
|-------------------|---|
| Alternative Name: | THG1L (THG1L Products)  |
| Background:       | Probable tRNA(His) guanylyltransferase (EC 2.7.7.79) (Induced in high glucose-1) (IHG-1) (Interphase cytoplasmic foci protein 45) (tRNA-histidine guanylyltransferase),FUNCTION: Adds a GMP to the 5'-end of tRNA(His) after transcription and RNase P cleavage. This step is essential for proper recognition of the tRNA and for the fidelity of protein synthesis (Probable). Also functions as a guanyl-nucleotide exchange factor/GEF for the MFN1 and MFN2 mitofusins |
|                   | thereby regulating mitochondrial fusion (PubMed:25008184, PubMed:27307223). By regulating both mitochondrial dynamics and bioenergetic function, it contributes to cell survival following oxidative stress (PubMed:25008184, PubMed:27307223). {ECO:0000269 PubMed:25008184, ECO:0000269 PubMed:27307223, ECO:0000305 PubMed:21059936}.  |
| Molecular Weight: | 34.8 kDa  |
| UniProt:          | Q9NWX6  |

## **Application Details**

| Application Notes: | We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though. |
|--------------------|---|
| Restrictions:      | For Research Use only   |
| Handling           |   |
| Format:            | Liquid  |
| Buffer:            | The buffer composition is at the discretion of the manufacturer.  |
| Handling Advice:   | Avoid repeated freeze-thaw cycles.  |
| Storage:           | -80 °C  |
| Storage Comment:   | Store at -80°C.   |
| Expiry Date:       | 12 months   |