

Datasheet for ABIN7555888  
**TTLL3 Protein (AA 1-772) (His tag)**



[Go to Product page](#)

## Overview

Quantity:	1 mg
Target:	TTLL3
Protein Characteristics:	AA 1-772
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This TTLL3 protein is labelled with His tag.

## Product Details

Purpose:	Custom-made recombinant TTLL3 Protein expressed in mammalian cells.
Sequence:	<p>MNRLRNAKIY VERA VKQKKI FTIQGCYPVI RCLLRRRGWV EKKMVHRSGP TLLPPQKDLD SSAMGDSDTT EDEDEDEDEE FQPSQLFDFD DLLKFDDLDG THALMVGLCL NLRNLPWFDE VDANSFFPRC YCLGAEDDKK AFIEDFWLTA ARNVLKL VVK SEWKSYP IQA VEEEASGDKQ PKKQEKNPVL VSPEFVDEAL CACEEYLSNL AHMDIDKDLE APLYLTPEGW SLFLQRY YQV VHEGAELRHL DTQVQRCEDI LQQLQAVVPQ IDMEGDRNIW IVKPGAKSRG RGIMCMDHLE EMLKLVNGNP VVMKDGKWWV QKYIERPLLI FGTKFDLRQW FLVTDWNPLT VWFYRDSYIR FSTQPFSLKN LDNSVHLCNN SIQKHLENSC HRHPLLPPDN MWSSQRFQAH LQEMGAPNAW STIIVPGMKD AVIHALQTSQ DTVQCRKASF ELYGADFVFG EDFQPWLIEI NASPTMAPST AVTARLCAGV QADTLRVVID RMLDRNCDTG AFELIYKQPA VEV PQYVGIR LLVEGFTIKK PMAMCHRRMG VRPAVPLL TQ RSGGEARHHF PSLHTKAQLP SPHVL RHQGQ VLRRQH SKLV GTKALSTTGK ALRTLPTAKV FISLPPNLDF KVAPSILKPR KAPALLCLRG PQLEVPCCLC PLKSEQFLAP VGRSRPKANS RPD CDK PRAE ACPMKRLSPL KPLPLVGT FQ RRRGLGDMKL</p>

## Product Details

---

GKPLLRFPFTA LVLDPNPKK KQVKYLGLDS IAVGGSRVDG ARPCTPGSTA RA **Sequence 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:** TTLL3

**Alternative Name:** TTLL3 ([TTLL3 Products](#))

**Background:** Tubulin monoglycylase TTLL3 (EC 6.3.2.-) (HOTTL) (Tubulin-tyrosine ligase-like protein 3),FUNCTION: Monoglycylase which modifies alpha- and beta-tubulin, adding a single glycine on the gamma-carboxyl groups of specific glutamate residues to generate monoglycine side chains within the C-terminal tail of tubulin. Not involved in elongation step of the polyglycylation reaction (By similarity). Preferentially glycyates a beta-tail peptide over the alpha-tail, although shifts its preference toward alpha-tail as beta-tail glutamylation increases (By similarity). Competes with polyglutamylases for modification site on beta-tubulin substrate, thereby

## Target Details

---

creating an anticorrelation between glycylation and glutamylation reactions (By similarity). Together with TTLL8, mediates microtubule glycylation of primary and motile cilia, which is essential for their stability and maintenance (By similarity). Involved in microtubule glycylation of primary cilia in colon which controls cell proliferation of epithelial cells and plays an essential role in colon cancer development (PubMed:25180231). Together with TTLL8, glycylates sperm flagella which regulates axonemal dynein motor activity, thereby controlling flagellar beat, directional sperm swimming and male fertility (By similarity). {ECO:0000250|UniProtKB:A4Q9E5, ECO:0000250|UniProtKB:B2GUB3, ECO:0000269|PubMed:25180231}.

Molecular Weight: 87.4 kDa

UniProt: [Q9Y4R7](#)

## 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