

Datasheet for ABIN7559975  
**TTLL1 Protein (AA 1-423) (His tag)**



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## Overview

Quantity:	1 mg
Target:	TTLL1
Protein Characteristics:	AA 1-423
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This TTLL1 protein is labelled with His tag.

## Product Details

Purpose:	Custom-made recombinant Ttl1 Protein expressed in mammalian cells.
Sequence:	<p>MAGRVKWVTD IEKSVLINNF EKRGIQVTE NEDWNFYWMS VQTIRNVFSV ETGYRLSDDQ IVNHFPNHYE LTRKDLMVKN IKRYRKELEK EGSPLAEKDE NGKYLYLDFV PVTYMLPADY NLFVEEFRKS PSSTWIMKPC GKAQKGIFL INKLSQIKKW SRDSKTSFV SQSTKEAYVI SVYINNPLLI GGRKFDLRLY VLVSTYRPLR CYMYKLGFCR FCTVKYTPST SELDNMFVHL TNVAIQKHGE DYNHIHGGKW TVNNLRLYLE STRGREVTSK LFDEIHWIIV QSLKAVAPVM NNDKHCFCY GYDIIIDDKL KPWLIEVNAS PSLTSSTAND RILKYNLIND TLNIAVPNGE IPDCKWNKSP PKEVLGNYEI LYDELAQGD GAERELRNRP GQPVGPRAGR SRDSGRSVLT TWK</p> <p><b>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.</b></p> <p><b>In case you have a special request, please contact us.</b></p>
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.

## Product Details

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### 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.

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### Purity:

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

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### Grade:

custom-made

## Target Details

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### Target:

TTLL1

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### Alternative Name:

Ttll1 ([TTLL1 Products](#))

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### Background:

Polyglutamylase complex subunit TTLL1 (EC 6.3.2.-) (Tubulin polyglutamylase TTLL1) (Tubulin polyglutamylase complex subunit 3) (PGs3) (Tubulin-tyrosine ligase-like protein 1) (p49),FUNCTION: Catalytic subunit of a polyglutamylase complex which modifies tubulin, generating side chains of glutamate on the gamma-carboxyl group of specific glutamate residues within the C-terminal tail of tubulin (PubMed:15890843). Probably involved in the side-chain elongation step of the polyglutamylation reaction rather than the initiation step (Probable). Modifies both alpha- and beta-tubulins with a preference for the alpha-tail (PubMed:15890843, PubMed:22170066). Unlike most polyglutamylases of the tubulin-tyrosine ligase family, only displays a catalytic activity when in complex with other proteins as it is most likely lacking domains important for autonomous activity (PubMed:15890843). Part of the neuronal tubulin polyglutamylase complex (PubMed:15890843). Mediates cilia and flagella polyglutamylation which is essential for their biogenesis and motility (PubMed:20498047, PubMed:20442420, PubMed:23897886). Involved in respiratory motile cilia function through the

## Target Details

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regulation of beating asymmetry (PubMed:20498047, PubMed:20442420). Essential for sperm flagella biogenesis, motility and male fertility (PubMed:20442420). Also mediates glutamylation of non-tubulin proteins (PubMed:29593216). Involved in KLF4 glutamylation which impedes its ubiquitination, thereby leading to somatic cell reprogramming, pluripotency maintenance and embryogenesis (PubMed:29593216). {ECO:0000269|PubMed:15890843, ECO:0000269|PubMed:20442420, ECO:0000269|PubMed:20498047, ECO:0000269|PubMed:22170066, ECO:0000269|PubMed:23897886, ECO:0000269|PubMed:29593216, ECO:0000305|Ref.11}.

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Molecular Weight: 49.1 kDa

UniProt: [Q91V51](#)

## Application Details

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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.

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Restrictions: For Research Use only

## Handling

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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