

# TTLL1 Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP9850c

# Specification

# TTLL1 Antibody (Center) Blocking Peptide - Product Information

Primary Accession

<u>095922</u>

# TTLL1 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 25809

**Other Names** 

Probable tubulin polyglutamylase TTLL1, 6---, Tubulin polyglutamylase complex subunit 3, PGs3, Tubulin--tyrosine ligase-like protein 1, TTLL1, C22orf7

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage** Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions** This product is for research use only. Not for use in diagnostic or therapeutic procedures.

# TTLL1 Antibody (Center) Blocking Peptide - Protein Information

Name TTLL1 (<u>HGNC:1312</u>)

Synonyms C22orf7

## 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:<a href="http://www.uniprot.org/citations/34782749"

target="\_blank">34782749</a>). Probably involved in the side-chain elongation step of the polyglutamylation reaction rather than the initiation step. Modifies both alpha- and beta-tubulins with a preference for the alpha-tail. 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. Part of the neuronal tubulin polyglutamylase complex. Mediates cilia and flagella polyglutamylation which is essential for their biogenesis and motility. Involved in respiratory motile cilia function through the regulation of beating asymmetry. Essential for sperm flagella biogenesis, motility and male fertility. Involved in KLF4 glutamylation which impedes its ubiquitination, thereby leading to somatic cell reprogramming, pluripotency maintenance and embryogenesis.

**Cellular Location** 



Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:Q91V51}. Cytoplasm, cytoskeleton, cilium basal body {ECO:0000250|UniProtKB:Q91V51}. Cytoplasm, cytoskeleton, cilium axoneme {ECO:0000250|UniProtKB:Q91V51}. Cell projection, cilium, flagellum {ECO:0000250|UniProtKB:Q91V51}

#### **Tissue Location**

Expressed in a wide range of tissues. Has a stronger expression in heart, brain and testis

## TTLL1 Antibody (Center) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

#### <u>Blocking Peptides</u>

TTLL1 Antibody (Center) Blocking Peptide - Images

### TTLL1 Antibody (Center) Blocking Peptide - Background

TTLL1 (Tubulin-tyrosine ligase-like protein 1) is a probable catalytic subunit of the neuronal tubulin polyglutamylase complex.

## **TTLL1 Antibody (Center) Blocking Peptide - References**

Eeles, R.A., et al. Nat. Genet. 41(10):1116-1121(2009)Janke, C., et al. Science 308(5729):1758-1762(2005)Collins, J.E., et al. Genome Res. 13(1):27-36(2003)Trichet, V., et al. Gene 257(1):109-117(2000)