

TTLL4 Antibody (Center) Blocking peptide

Synthetic peptide Catalog # BP12581c

Specification

TTLL4 Antibody (Center) Blocking peptide - Product Information

Primary Accession

Q14679

TTLL4 Antibody (Center) Blocking peptide - Additional Information

Gene ID 9654

Other Names

Tubulin polyglutamylase TTLL4, 6---, Tubulin-tyrosine ligase-like protein 4, TTLL4, KIAA0173

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.

TTLL4 Antibody (Center) Blocking peptide - Protein Information

Name TTLL4 (HGNC:28976)

Synonyms KIAA0173

Function

Monoglutamylase which modifies both tubulin and non-tubulin proteins, adding a single glutamate on the gamma-carboxyl group of specific glutamate residues of target proteins. Involved in the side- chain initiation step of the polyglutamylation reaction but not in the elongation step. Preferentially modifies beta-tail tubulin over the alpha-tubulin. Monoglutamylates nucleosome assembly proteins NAP1L1 and NAP1L4. Monoglutamylates nucleotidyltransferase CGAS, leading to inhibition of CGAS catalytic activity, thereby preventing antiviral defense function. Involved in KLF4 glutamylation which impedes its ubiquitination, thereby leading to somatic cell reprogramming, pluripotency maintenance and embryogenesis.

Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:Q80UG8}. Cell projection, cilium {ECO:0000250|UniProtKB:Q80UG8}. Cytoplasm, cytoskeleton, cilium basal body {ECO:0000250|UniProtKB:Q80UG8} Note=Located in cilia. In some cells, also found in basal bodies {ECO:0000250|UniProtKB:Q80UG8}



TTLL4 Antibody (Center) Blocking peptide - Protocols

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

• Blocking Peptides

TTLL4 Antibody (Center) Blocking peptide - Images

TTLL4 Antibody (Center) Blocking peptide - Background

TTLL4 is polyglutamylase which preferentially modifies beta-tubulin and nucleosome assembly proteins NAP1 and NAP2. It is involved in the side-chain initiation step of the polyglutamylation reaction rather than in the elongation step (By similarity).

TTLL4 Antibody (Center) Blocking peptide - References

Trichet, V., et al. Gene 257(1):109-117(2000)