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TTLL4 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12581c

Product Information

Application	WB, E
Primary Accession	Q14679
Other Accession	NP_055455.3
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB31425
Calculated MW	133378
Antigen Region	464-493

Additional Information

Gene ID	9654
Other Names	Tubulin polyglutamylase TTLL4, 6---, Tubulin--tyrosine ligase-like protein 4, TTLL4, KIAA0173
Target/Specificity	This TTLL4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 464-493 amino acids from the Central region of human TTLL4.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	TTLL4 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

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}

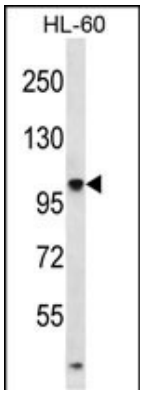
Background

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).

References

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

Images



TTLL4 Antibody (Center) (Cat. #AP12581c) western blot analysis in HL-60 cell line lysates (35ug/lane).This demonstrates the TTLL4 antibody detected the TTLL4 protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.