

TNKS Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14867a

Specification

TNKS Antibody (N-term) - Product Information

Application WB, IHC-P,E
Primary Accession 095271

Other Accession Q6PFX9, NP 003738.2

Reactivity
Predicted
Host
Clonality
Isotype
Calculated MW
Antigen Region

Human
Mouse
Rabbit
Polyclonal
Rabbit IgG
142039
55-82

TNKS Antibody (N-term) - Additional Information

Gene ID 8658

Other Names

Tankyrase-1, TANK1, ADP-ribosyltransferase diphtheria toxin-like 5, ARTD5, Poly [ADP-ribose] polymerase 5A, TNKS-1, TRF1-interacting ankyrin-related ADP-ribose polymerase, Tankyrase I, TNKS, PARP5A, PARPL, TIN1, TINF1, TNKS1

Target/Specificity

This TNKS antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 55-82 amino acids from the N-terminal region of human TNKS.

Dilution

WB~~1:1000 IHC-P~~1:10~50

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

TNKS Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

TNKS Antibody (N-term) - Protein Information



Name TNKS (HGNC:11941)

Function Poly-ADP-ribosyltransferase involved in various processes such as Wnt signaling pathway, telomere length and vesicle trafficking (PubMed:10988299, PubMed:11739745, PubMed:16076287, PubMed:19759537, PubMed:21478859, PubMed:22864114, PubMed:23622245, PubMed:25043379, PubMed:28619731). Acts as an activator of the Wnt signaling pathway by mediating poly-ADP-ribosylation (PARsylation) of AXIN1 and AXIN2, 2 key components of the beta-catenin destruction complex: poly-ADP- ribosylated target proteins are recognized by RNF146, which mediates their ubiquitination and subsequent degradation (PubMed:19759537, PubMed:21478859). Also mediates PARsylation of BLZF1 and CASC3, followed by recruitment of RNF146 and subsequent ubiquitination (PubMed:21478859). Mediates PARsylation of TERF1, thereby contributing to the regulation of telomere length (PubMed:11739745). Involved in centrosome maturation during prometaphase by mediating PARsylation of HEPACAM2/MIKI (PubMed:22864114). May also regulate vesicle trafficking and modulate the subcellular distribution of SLC2A4/GLUT4-vesicles (PubMed:10988299). May be involved in spindle pole assembly through PARsylation of NUMA1 (PubMed:16076287). Stimulates 26S proteasome activity (PubMed:23622245).

Cellular Location

Cytoplasm. Golgi apparatus membrane; Peripheral membrane protein. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Nucleus, nuclear pore complex. Chromosome, telomere. Cytoplasm, cytoskeleton, spindle pole. Note=Associated with the Golgi and with juxtanuclear SLC2A4/GLUT4-vesicles (PubMed:22864114). A minor proportion is also found at nuclear pore complexes and around the pericentriolar matrix of mitotic centromeres (PubMed:10523501). During interphase, a small fraction of TNKS is found in the nucleus, associated with TERF1 (PubMed:12768206). Localizes to spindle poles at mitosis onset via interaction with NUMA1 (PubMed:12080061)

Tissue Location

Ubiquitous; highest levels in testis.

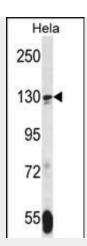
TNKS Antibody (N-term) - Protocols

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

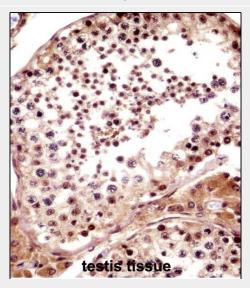
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

TNKS Antibody (N-term) - Images





TNKS Antibody (N-term) (Cat. #AP14867a) western blot analysis in Hela cell line lysates (35ug/lane). This demonstrates the TNKS antibody detected the TNKS protein (arrow).



TNKS Antibody (N-term) (AP14867a)immunohistochemistry analysis in formalin fixed and paraffin embedded human testis tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of TNKS Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

TNKS Antibody (N-term) - Background

TNKS may regulate vesicle trafficking and modulate the subcellular distribution of SLC2A4/GLUT4-vesicles. Has PARP activity and can modify TERF1, and thereby contribute to the regulation of telomere length.

TNKS Antibody (N-term) - References

Hatsugai, K., et al. FEBS Lett. 584(18):3885-3890(2010) Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010): Olson, J.E., et al. Breast Cancer Res. Treat. (2010) In press: Davila, S., et al. Genes Immun. 11(3):232-238(2010) Scherag, A., et al. PLoS Genet. 6 (4), E1000916 (2010):