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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	O95271
Other Accession	Q6PFX9, NP_003738.2
Reactivity	**Human**
Predicted	**Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**142039**
Antigen Region	**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

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). 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.

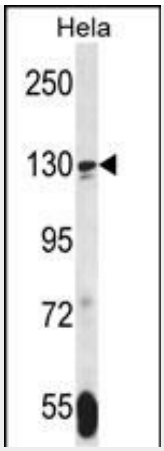
TNKS Antibody (N-term) - Protocols

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

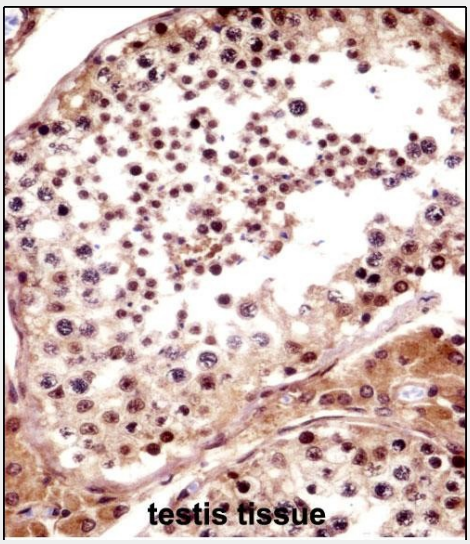
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

TNKS Antibody (N-term) - Images

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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) :