

TNKS Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP14867a**Specification**

TNKS Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [O95271](#)**TNKS Antibody (N-term) Blocking Peptide - 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

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.

TNKS Antibody (N-term) Blocking Peptide - 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).

target="_blank">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/MIK1 (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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

TNKS Antibody (N-term) Blocking Peptide - Images

TNKS Antibody (N-term) Blocking Peptide - 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) Blocking Peptide - 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) :