

Tnks Blocking Peptide (N-term)
Synthetic peptide
Catalog # BP5357a**Specification**

Tnks Blocking Peptide (N-term) - Product Information

Primary Accession [O95271](#)
Other Accession [O6PFX9](#), [NP_003738.2](#)

Tnks Blocking Peptide (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

The synthetic peptide sequence is selected from aa 71-89 of HUMAN TNKS

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 Blocking Peptide (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](http://www.uniprot.org/citations/10988299), PubMed: [11739745](http://www.uniprot.org/citations/11739745), PubMed: [16076287](http://www.uniprot.org/citations/16076287), PubMed: [19759537](http://www.uniprot.org/citations/19759537), PubMed: [21478859](http://www.uniprot.org/citations/21478859), PubMed: [22864114](http://www.uniprot.org/citations/22864114), PubMed: [23622245](http://www.uniprot.org/citations/23622245), PubMed: [25043379](http://www.uniprot.org/citations/25043379), PubMed: [28619731](http://www.uniprot.org/citations/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/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 Blocking Peptide (N-term) - Protocols

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

- [Blocking Peptides](#)

Tnks Blocking Peptide (N-term) - Images

Tnks Blocking Peptide (N-term) - References

Davila, S., et al. Genes Immun. (2010) In press :
Shen, J., et al. Cancer Epidemiol. Biomarkers Prev. 19(1):219-228(2010)
Appierto, V., et al. Mol. Cancer Ther. 8(12):3360-3368(2009)
Varadi, V., et al. Eur. J. Cancer 45(17):3008-3016(2009)
Choi, J.E., et al. Cancer Epidemiol. Biomarkers Prev. 18(10):2773-2781(2009)
Lyons, R.J., et al. J. Biol. Chem. 276(20):17172-17180(2001)
Chi, N.W., et al. J. Biol. Chem. 275(49):38437-38444(2000)
Smith, S., et al. J. Cell. Sci. 112 (PT 21), 3649-3656 (1999) :
Zhu, L., et al. Genomics 57(2):320-321(1999)
Smith, S., et al. Science 282(5393):1484-1487(1998)