

**Tankyrase Polyclonal Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP59144****Specification****Tankyrase Polyclonal Antibody - Product Information**

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	<a href="#">O95271</a>
Reactivity	Rat, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	142 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Tankyrase
Epitope Specificity	1101-1250/1327
<b>Purity</b>	
affinity purified by Protein A	
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm.
SIMILARITY	Contains 1 C2H2-type zinc finger.
SUBUNIT	Interacts with TBK1 (via TRAF-C domain). Interacts with TRAF1 (via TRAF-C domain). Interacts with TRAF2 (via TRAF-C domain); the interaction is disrupted by the phosphorylation of TANK by IKBKE. Interacts with TRAF3 (via TRAF-C domain); the interaction with TRAF3 is weaker than the interactions with TRAF1 and TRAF3. Interacts with IKBKG; the interaction is enhanced by IKBKE and TBK1. Part of a ternary complex consisting of TANK, IKBKB and IKBKG.
Post-translational modifications	Phosphorylated by IKBKE.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

**Background Descriptions**

TANK was initially identified as a novel TRAF-interacting protein that regulated TRAF-mediated signal transduction. Specifically, ligand binding by surface receptors in the tumor necrosis factor (TNF) receptor and Toll/interleukin-1 (IL-1) receptor families lead to the formation of a TRAF/TANK complex that mediates the activation of the transcription factor NF-kappaB. TANK is found in the cytoplasm and can bind to TRAF1, TRAF2, or TRAF3, thereby inhibiting TRAF function by sequestering the TRAFs in a latent state in the cytoplasm. For example, this protein can block TRAF2 binding to LMP1, the Epstein Barr virus transforming protein, and inhibit LMP1-mediated NF kappa B activation.

**Tankyrase Polyclonal Antibody - Additional Information**

**Gene ID 8658****Other Names**

Poly [ADP-ribose] polymerase tankyrase-1, 2.4.2.30, ADP-ribosyltransferase diphtheria toxin-like 5, ARTD5, Poly [ADP-ribose] polymerase 5A, Protein poly-ADP-ribosyltransferase tankyrase-1, 2.4.2.-, TNKS-1, TRF1-interacting ankyrin-related ADP-ribose polymerase, Tankyrase I, Tankyrase-1, TANK1, TNKS ([http://www.genenames.org/cgi-bin/gene\\_symbol\\_report?hgnc\\_id=11941](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=11941))

**Target/Specificity**

Ubiquitous.

**Dilution**

WB~1:1000  
IHC-P~N/A  
IHC-F~N/A  
IF~1:50~200  
E~N/A

**Storage**

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

**Tankyrase Polyclonal Antibody - Protein Information**

**Name** TNKS ([HGNC:11941](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=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](http://www.uniprot.org/citations/19759537), PubMed:[21478859](http://www.uniprot.org/citations/21478859)). Also mediates PARsylation of BLZF1 and CASC3, followed by recruitment of RNF146 and subsequent ubiquitination (PubMed:[21478859](http://www.uniprot.org/citations/21478859)). Mediates PARsylation of TERF1, thereby contributing to the regulation of telomere length (PubMed:[11739745](http://www.uniprot.org/citations/11739745)). Involved in centrosome maturation during prometaphase by mediating PARsylation of HEPACAM2/MIK1 (PubMed:[22864114](http://www.uniprot.org/citations/22864114)). May also regulate vesicle trafficking and modulate the subcellular distribution of SLC2A4/GLUT4-vesicles (PubMed:[10988299](http://www.uniprot.org/citations/10988299)). May be involved in spindle pole assembly through PARsylation of NUMA1 (PubMed:[16076287](http://www.uniprot.org/citations/16076287))

target="\_blank">16076287</a>). Stimulates 26S proteasome activity (PubMed:<a href="http://www.uniprot.org/citations/23622245" target="\_blank">23622245</a>).

**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.

**Tankyrase Polyclonal Antibody - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Tankyrase Polyclonal Antibody - Images**