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Tankyrase / TANK1 Antibody (N-Term)
Peptide-affinity Purified goat antibody
Catalog # AF2233a

Specification

Tankyrase / TANK1 Antibody (N-Term) - Product Information

Application	**WB**
Primary Accession	O95271
Other Accession	NP_003738.2, 8658
Reactivity	**Human**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**0.5 mg/ml**
Isotype	**IgG**
Calculated MW	**142039**

Tankyrase / TANK1 Antibody (N-Term) - Additional Information

Gene ID 8658

Other Names
Tankyrase-1, TANK1, 2.4.2.30, 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

Dilution
WB~~1:1000

Format
0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Tankyrase / TANK1 Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

Tankyrase / TANK1 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:<a

href="http://www.uniprot.org/citations/11739745" target="_blank">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.

Tankyrase / TANK1 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

Tankyrase / TANK1 Antibody (N-Term) - Images

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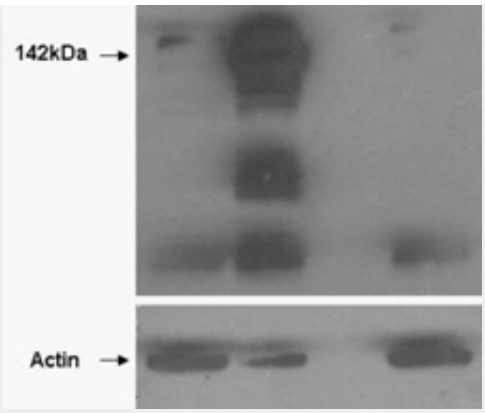

HEK293 overexpressing TANK1 (lane 2) and TANK2 (lane 4) and probed with AF2233a (mock transfection in first lane). Lane three is empty. Lower panel shows the same lysates probed for alpha-Actin to show protein levels. Primary incubation (0.5ug/ml) was overnight at 4°C. Detected by chemiluminescence.

Tankyrase / TANK1 Antibody (N-Term) - Background

Fusion protein containing 120aa amino acids from N Terminal region (according to NP_003738.2)

Tankyrase / TANK1 Antibody (N-Term) - References

Tankyrase 1 as a target for telomere-directed molecular cancer therapeutics. Seimiya H, Muramatsu Y, Ohishi T, Tsuruo T. Cancer Cell. 2005 Jan;7(1):25-37. PMID: 15652747