

# Tankyrase 2 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP58658

## Product Information

|                                         |                                                                                                                                                                                                                                                                                                                         |
|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Application</b>                      | IHC-P, IHC-F, IF, ICC                                                                                                                                                                                                                                                                                                   |
| <b>Primary Accession</b>                | <a href="#">Q9H2K2</a>                                                                                                                                                                                                                                                                                                  |
| <b>Reactivity</b>                       | Rat, Pig, Dog, Bovine                                                                                                                                                                                                                                                                                                   |
| <b>Host</b>                             | Rabbit                                                                                                                                                                                                                                                                                                                  |
| <b>Clonality</b>                        | Polyclonal                                                                                                                                                                                                                                                                                                              |
| <b>Calculated MW</b>                    | 126918                                                                                                                                                                                                                                                                                                                  |
| <b>Physical State</b>                   | Liquid                                                                                                                                                                                                                                                                                                                  |
| <b>Immunogen</b>                        | KLH conjugated synthetic peptide derived from human Tankyrase 2                                                                                                                                                                                                                                                         |
| <b>Epitope Specificity</b>              | 1-100/1166                                                                                                                                                                                                                                                                                                              |
| <b>Isotype</b>                          | IgG                                                                                                                                                                                                                                                                                                                     |
| <b>Purity</b>                           | affinity purified by Protein A                                                                                                                                                                                                                                                                                          |
| <b>Buffer</b>                           | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.                                                                                                                                                                                                                                                       |
| <b>SUBCELLULAR LOCATION</b>             | Cytoplasm. Golgi apparatus membrane. Nucleus. Chromosome > telomere. Associated with the Golgi and with juxtanuclear SLC2A4/GLUT4-vesicles. Also found around the pericentriolar matrix of mitotic centromeres. During interphase, a small fraction of TNKS2 is found in the nucleus, associated with TRF1.             |
| <b>SIMILARITY</b>                       | Contains 15 ANK repeats. Contains 1 PARP catalytic domain. Contains 1 SAM (sterile alpha motif) domain.                                                                                                                                                                                                                 |
| <b>Post-translational modifications</b> | Ubiquitinated at 'Lys-48' and 'Lys-63' by RNF146 when auto-poly-ADP-ribosylated; this leads to degradation. ADP-ribosylated (-auto). Poly-ADP-ribosylated protein is recognized by RNF146, followed by ubiquitination. The crystallographic evidence suggests that the 3-hydroxyhistidine may be the (3S) stereoisomer. |
| <b>Important Note</b>                   | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.                                                                                                                                                                                               |

## Additional Information

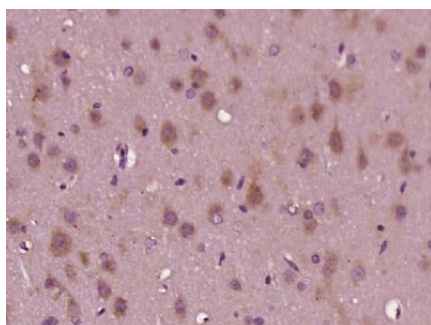
|                           |                                                                                                                                                                                                                                                                                                                                                                                                   |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene ID</b>            | 80351                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Other Names</b>        | Poly [ADP-ribose] polymerase tankyrase-2, 2.4.2.30, ADP-ribosyltransferase diphtheria toxin-like 6, ARTD6, Poly [ADP-ribose] polymerase 5B, Protein poly-ADP-ribosyltransferase tankyrase-2, 2.4.2.-, TNKS-2, TRF1-interacting ankyrin-related ADP-ribose polymerase 2, Tankyrase II, Tankyrase-2, TANK2, Tankyrase-like protein, Tankyrase-related protein, TNKS2 ( <a href="#">HGNC:15677</a> ) |
| <b>Target/Specificity</b> | Highly expressed in placenta, skeletal muscle, liver, brain, kidney, heart, thymus, spinal cord, lung, peripheral blood leukocytes, pancreas, lymph nodes, spleen, prostate, testis, ovary, small intestine, colon, mammary gland, breast and breast carcinoma, and in common-type meningioma. Highly expressed in fetal liver, heart and brain.                                                  |

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|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Dilution</b> | IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500                                                                                                                                      |
| <b>Format</b>   | 0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce                                                                                                                            |
| <b>Storage</b>  | 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. |

## Protein Information

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|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Name</b>              | TNKS2 ( <a href="#">HGNC:15677</a> )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Function</b>          | Poly-ADP-ribosyltransferase involved in various processes such as Wnt signaling pathway, telomere length and vesicle trafficking (PubMed: <a href="#">11739745</a> , PubMed: <a href="#">11802774</a> , PubMed: <a href="#">19759537</a> , PubMed: <a href="#">21478859</a> , PubMed: <a href="#">23622245</a> , PubMed: <a href="#">25043379</a> ). Acts as an activator of the Wnt signaling pathway by mediating poly-ADP-ribosylation 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: <a href="#">19759537</a> , PubMed: <a href="#">21478859</a> ). Also mediates poly-ADP-ribosylation of BLZF1 and CASC3, followed by recruitment of RNF146 and subsequent ubiquitination (PubMed: <a href="#">21478859</a> ). Mediates poly-ADP-ribosylation of TERF1, thereby contributing to the regulation of telomere length (PubMed: <a href="#">11739745</a> ). Stimulates 26S proteasome activity (PubMed: <a href="#">23622245</a> ). |
| <b>Cellular Location</b> | Cytoplasm. Golgi apparatus membrane; Peripheral membrane protein. Nucleus. Chromosome, telomere Note=Associated with the Golgi and with juxtannuclear SLC2A4/GLUT4- vesicles. Also found around the pericentriolar matrix of mitotic centromeres. During interphase, a small fraction of TNKS2 is found in the nucleus, associated with TRF1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Tissue Location</b>   | Highly expressed in placenta, skeletal muscle, liver, brain, kidney, heart, thymus, spinal cord, lung, peripheral blood leukocytes, pancreas, lymph nodes, spleen, prostate, testis, ovary, small intestine, colon, mammary gland, breast and breast carcinoma, and in common-type meningioma. Highly expressed in fetal liver, heart and brain                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

## Images



Paraformaldehyde-fixed, paraffin embedded (rat brain tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Tankyrase 2) Polyclonal Antibody, Unconjugated (AP58658) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.