

Rabbit Anti-Tankyrase antibody

SL9104R

Product Name:	Tankyrase
Chinese Name:	端粒调控因子抗体
Alias:	PARP 5a; PARP5A; PARPL; pART5; Poly [ADP-ribose] polymerase 5A; TANK 1; TANK1; Tankyrase 1; Tankyrase I; Tankyrase TRF1 interacting ankyrin related ADP ribose polymerase; Tankyrase-1; Tankyrase1; TankyraseI; TIN 1; TIN1; TINF 1; TINF1; TNKS 1; TNKS; TNKS-1; TNKS1; TNKS1_HUMAN; TRF1 interacting ankyrin related ADP ribose polymerase; TRF1-interacting ankyrin-related ADP-ribose polymerase.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Cow,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:50-200 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	142kDa
Cellular localization:	The nucleuscytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Tankyrase:1101-1250/1327
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 癈 for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20癈. 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 癈.
PubMed:	<u>PubMed</u>
Product Detail:	Tankyrase-1 and the closely related homolog Tankyrase-2 arepoly(ADP-ribose)

polymerases (PARPs) that co-localize and use an ankyrin-repeat domain to bind diverse proteins, including TRF-1 (telomere-repeat-binding factor 1), IRAP (insulin-responsive aminopeptidase) and TAB182. Tankyrase-1 (also known as TNKS and TNKS1) and Tankyrase-2 (also known as TNKS2, TNKL and TANK2) interact with the same set of proteins and probably mediate overlapping functions, both at telomeres and in vesicular compartments. Overexpression of Tankyrase-1 in the nucleus promotes telomere elongation, suggesting that Tankyrase 1 may regulate access of telomerase to the telomeric complex. Overexpression of Tankyrase-2 in the nucleus releases endogenous TRF1 from telomeres, establishing Tankyrase-2 as a PARP with itself and TRF1 as acceptors of ADP-ribosylation, and suggesting the possibility of a role for Tankyrase-2 at telomeres. The ankyrin (ANK) domain of Tankyrase-2 comprises five subdomains that provide redundant binding sites for IRAP. Tankyrase-2 lacks the N-terminal Histidine/Proline/Serine-rich region of Tankyrase-1, but contains a corresponding ankyrin repeat region, sterile ?motif module and poly(ADP-ribose) polymerase homology domain. The gene encoding Tankyrase-2 is widely expressed, with mRNA transcripts particularly abundant in skeletal muscle and placenta.

Subunit:

Oligomerizes and associates with TNKS2. Interacts with the cytoplasmic domain of LNPEP/Otase in SLC2A4/GLUT4-vesicles. Binds to the N-terminus of telomeric TERF1 via the ANK repeats. Found in a complex with POT1; TERF1 and TINF2. Interacts with AXIN1, AXIN2, BLZF1 and CASC3.

Subcellular Location:

Cytoplasm. Golgi apparatus membrane. Chromosome > centromere. Nucleus > nuclear pore complex. Chromosome > telomere. Associated with the Golgi and with juxtanuclear SLC2A4/GLUT4-vesicles. A minor proportion is also found at nuclear pore complexes and around the pericentriolar matrix of mitotic centromeres. During interphase, a small fraction of TNKS is found in the nucleus, associated with TERF1.

Tissue Specificity:

Ubiquitous; highest levels in testis.

Similarity:

Contains 15 ANK repeats.

Contains 1 PARP catalytic domain.

Contains 1 SAM (sterile alpha motif) domain.

SWISS:

O95271

Gene ID:

8658

Database links:

Entrez Gene: 8658Human

Entrez Gene: 21951Mouse

Entrez Gene: 290794Rat

Omim: 603303Human

SwissProt: O95271Human

SwissProt: Q6PFX9Mouse

Unigene: 370267Human

Unigene: 88364Mouse

<u>Unigene: 213840</u>Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.