

Product name:	TRF1 (phospho Ser219) Rabbit Polyclonal Antibody
Cat number:	ABN05578
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human Telomeric Repeat Binding Factor 1 around the phosphorylation site of Ser219. AA range:185-234
Reactivity:	Human,Mouse
Applications:	WB 1:500-1:2000,ELISA 1:5000-1:10000
Molecular Weight:	55kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

This gene encodes a telomere specific protein which is a component of the telomere nucleoprotein complex. This protein is present at telomeres throughout the cell cycle and functions as an inhibitor of telomerase, acting in cis to limit the elongation of individual chromosome ends. The protein structure contains a C-terminal Myb motif, a dimerization domain near its N-terminus and an acidic N-terminus. Two transcripts of this gene are alternatively spliced products. [provided by RefSeq, Jul 2008],domain:The acidic N-terminal domain binds to the ankyrin repeats of TNKS1 and TNKS2. The C-terminal domain binds microtubules.,function:Binds the telomeric double-stranded TTAGGG repeat and negatively regulates telomere length. Involved in the regulation of the mitotic spindle. Component of the shelterin complex (telosome) that is involved in the regulation of telomere length and protection. Shelterin associates with arrays of double-stranded TTAGGG repeats added by telomerase and protects chromosome ends; without its protective activity, telomeres are no longer hidden from the DNA damage surveillance and chromosome ends are inappropriately processed by DNA repair pathways.,induction:Pin2 expression is tightly regulated during the cell cycle; levels are low in G1 and S phase and increase during G2 phase and mitosis.,PTM:ADP-ribosylation by TNKS1 or TNKS2 diminishes its ability to bind to telomeric DNA.,PTM:Phosphorylated preferentially on Ser-219 in an ATM-dependent manner in response to ionizing DNA damage.,similarity:Contains 1 HTH myb-type DNA-binding domain.,subcellular location:Colocalizes with telomeric DNA in interphase and metaphase cells and is located at chromosome ends during metaphase. Associates with the mitotic spindle.,subunit:Homodimer; can contain both isoforms. Found in a complex with POT1; TIN2 and TNKS1. Interacts with ATM, TIN2, TNKS1, TNKS2, PINX1, NEK2 and MAPRE1. Component of the shelterin complex (telosome) composed of TERF1, TERF2, TIN2, TERF2IP ACD and POT1.,tissue specificity:Highly expressed and ubiquitous. Isoform Pin2 predominates.,