



TRF1 Rabbit mAb

Catalog No	YP-rAb-17310
Isotype	IgG
Reactivity	Human,Mouse
Applications	WB,IF,ELISA
Gene Name	TERF1
Protein Name	Telomeric repeat-binding factor 1
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	WB 1:1000-1:5000; IF 1:200-1:1000; ELISA 1:5000-1:20000;
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15° C to -25° C/1 year(Do not lower than -25° C)
Synonyms	TERF1 ; PIN2 ; TRBF1 ; TRF ; TRF1 ; Telomeric repeat-binding factor 1 ; NIMA-interacting protein 2 ; TTAGGG repeat-binding factor 1 ; Telomeric protein Pin2/TRF1
Observed Band	60kD
Calculated Molecular Weight	50kD
Cell Pathway	Nucleus. Cytoplasm, cytoskeleton, spindle. Chromosome, telomere. Colocalizes with telomeric DNA in interphase and prophase cells. Telomeric localization decreases in metaphase, anaphase and telophase. Associates with the mitotic spindle.
Tissue Specificity	Highly expressed and ubiquitous. Isoform Pin2 predominates.
Function	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; TINF2 and TNKS1. Interacts with ATM, TINF2, TNKS1, TNKS2, PINX1, NEK2 and MAPRE1. Component of the shelterin complex (telosome) composed of TERF1, TERF2, TINF2, TERF2IP ACD and POT1.,tissue specificity:Highly expressed and ubiquitous. Isoform Pin2 predominates.,

Background

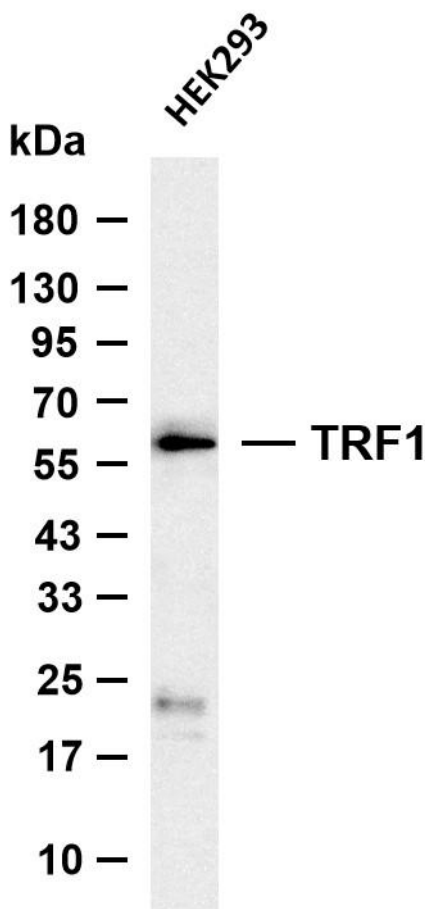
This gene encodes a telomere specific protein which is a component of the telomere nucleoprotein complex. This protein is present at telomeres throughout the cell cycle and functions as an inhibitor of telomerase, acting in cis to limit the elongation of individual chromosome ends. The protein structure 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],

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-TRF1 antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: HEK293 Predicted band size: 50kDa Observed band size: 60kDa

