

ARG59142 anti-TERF2 / Trf2 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes TERF2 / Trf2
Tested Reactivity	Hu
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	TERF2 / Trf2
Species	Human
Immunogen	Synthetic peptide derived from Human TERF2 / Trf2.
Conjugation	Un-conjugated
Alternate Names	Telomeric DNA-binding protein; TRF2; TTAGGG repeat-binding factor 2; TRBF2; Telomeric repeat-binding factor 2

Application Instructions

Application table	Application	Dilution
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	~ 73 kDa	

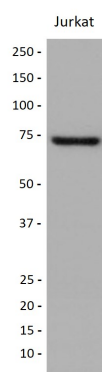
Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.4), 150mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	TERF2
Gene Full Name	telomeric repeat binding factor 2
Background	This gene encodes a telomere specific protein, TERF2, which is a component of the telomere nucleoprotein complex. This protein is present at telomeres in metaphase of the cell cycle, is a second negative regulator of telomere length and plays a key role in the protective activity of telomeres. While having similar telomere binding activity and domain organization, TERF2 differs from TERF1 in that its N terminus is basic rather than acidic. [provided by RefSeq, Jul 2008]
Function	Binds the telomeric double-stranded 5'-TTAGGG-3' repeat and plays a central role in telomere maintenance and protection against end-to-end fusion of chromosomes. In addition to its telomeric DNA-binding role, required to recruit a number of factors and enzymes required for telomere protection, including the shelterin complex, TERF2IP/RAP1 and DCLRE1B/Apollo. Component of the shelterin complex (telosome) that is involved in the regulation of telomere length and protection. Shelterin associates with arrays of double-stranded 5'-TTAGGG-3' 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. Together with DCLRE1B/Apollo, plays a key role in telomeric loop (T loop) formation by generating 3' single-stranded overhang at the leading end telomeres: T loops have been proposed to protect chromosome ends from degradation and repair. Required both to recruit DCLRE1B/Apollo to telomeres and activate the exonuclease activity of DCLRE1B/Apollo. Preferentially binds to positive supercoiled DNA. Together with DCLRE1B/Apollo, required to control the amount of DNA topoisomerase (TOP1, TOP2A and TOP2B) needed for telomere replication during fork passage and prevent aberrant telomere topology. Recruits TERF2IP/RAP1 to telomeres, thereby participating in to repressing homology-directed repair (HDR), which can affect telomere length. [UniProt]
Calculated Mw	60 kDa
PTM	Phosphorylated upon DNA damage, most probably by ATM. Phosphorylated TERF2 is not bound to telomeric DNA, and rapidly localizes to damage sites. Methylated by PRMT1 at multiple arginines within the N-terminal Arg-rich region. Methylation may control association with telomeres. [UniProt]
Cellular Localization	Nucleus. Chromosome, telomere. Note=Colocalizes with telomeric DNA in interphase cells and is located at chromosome ends during metaphase. [UniProt]

Images



ARG59142 anti-TERF2 / Trf2 antibody WB image

Western blot: Jurkat cell lysate stained with ARG59142 anti-TERF2 / Trf2 antibody.