Rabbit TRF2 Polyclonal Antibody | anti-TRF2 antibody

Phospho-TRF2 (Thr188) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA329760	**Rabbit**	**Human, Mouse, RatPredicted Reactivity: Pig (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (82%), Dog (100%), Chicken (83%)**	**ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot**

PRODUCT SYNONYMS

TRF2; Polyclonal Antibody; Phospho-TRF2 (Thr188) Antibody; Telomeric DNA binding protein; Telomeric DNA-binding protein; Telomeric repeat binding factor 2; Telomeric repeat binding protein 2; Telomeric repeat-binding factor 2; TERF 2; Terf2; TERF2_HUMAN; TRBF 2; TRBF2; TRF 2; TTAGGG repeat binding factor 2; TTAGGG repeat-binding factor 2; anti-TRF2 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted Reactivity: Pig (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (82%), Dog (100%), Chicken (83%)
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-TRF2 (Thr188) Antibody detects endogenous levels of TRF2 only when phosphorylated at Thr188. Tissue Specificity: Ubiquitous. Highly expressed in spleen, thymus, prostate, uterus, testis, small intestine, colon and peripheral blood leukocytes.
Purity/Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-TRF2 antibody	ELISA (Peptide ELISA), ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human TRF2 around the phosphorylation site of Thr188.
Conjugation	Unconjugated
Fragment	Fab fragment
Post Translational Modifications	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.
Subunit Structure	Homodimer. Component of the shelterin complex (telosome) composed of TERF1, TERF2, TINF2, TERF2IP/RAP1, ACD and POT1. Interacts with TERF2IP. Interacts with NBN. Interacts with SLX4/BTBD12. Interacts with DCLRE1B/Apollo and TERF2IP/RAP1; the interaction is direct.
Similarity	The TRFH dimerization region mediates the interaction with DCLRE1B/Apollo but not TINF2.The HTH domain is an independent structural unit and mediates binding to telomeric DNA.
Subcellular Location	Nucleus. Chromosome>Telomere. Note: Colocalizes with telomeric DNA in interphase cells and is located at chromosome ends during metaphase.
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES

Application Data
At 25 degree C. Samples were then incubated with primary Ab(At 37 degree C. An AlexaFluor594 conjugated goat anti-rabbit IgG(H+L) Ab(Red) and an AlexaFluor488 conjugated goat anti-mouse IgG(H+L) Ab(Green) were used as the secondary antibody.The nuclear counter stain is DAPI(blue).

IHC (Immunohistochemisry)
At 1/100 staining Human ovarian cancer by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.

IHC (Immunohiostchemistry)
Staining Human ovarian cancer by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.

WB (Western Blot)
Western blot analysis of TRF2 (Phospho-Thr188) using 293 whole cell lysates.-/+ means absence or presence of N peptideï¼ˆnon-phospho peptide) and P peptide(phospho peptide).

ADDITIONAL INFORMATION

Related Product Information for anti-TRF2 antibody	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.

NCBI AND UNIPROT INFORMATION

NCBI GI #	613504836
NCBI GeneID	7014
UniProt Accession #	Q15554
Molecular Weight	500
NCBI Official Full Name	Telomeric repeat-binding factor 2
NCBI Official Synonym Full Names	telomeric repeat binding factor 2
NCBI Official Symbol	TERF2
NCBI Official Synonym Symbols	TRF2; TRBF2
NCBI Protein Information	telomeric repeat-binding factor 2; telomeric DNA-binding protein; TTAGGG repeat-binding factor 2; telomeric repeat binding protein 2
UniProt Protein Name	Telomeric repeat-binding factor 2
UniProt Gene Name	**TERF2**
UniProt Synonym Gene Names	TRBF2; TRF2

UniProt Entry Name	TERF2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: https://stage.aaabiotech.com/polyclonal/trf2-antibody-peptide-elisa-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/329760