

Purified anti-TRF2 Antibody

Catalog# / Size	692402 / 100 µg
Clone	T2JKM3
Regulatory Status	RUO
Other Names	TERF2, Telomeric repeat-binding factor 2, TRBF2, TTAGGG repeat-binding factor 2, Telomeric DNA-binding protein,
Isotype	Mouse IgG1, κ
Description	Telomeric Repeat-binding Factor 2 (TRF2) is a component of the shelterin complex, which is a six-protein complex bound to chromosome termini. The shelterin complex is essential for protecting the integrity of natural chromosome ends. Within the shelterin complex, POT1 binds single-stranded telomeric overhang, while TRF1 and TRF2 bind duplex telomeric DNA and recruit TIN2, TPP1, POT1 and Rap1 to telomeres. Inhibition of TRF2 activates DNA repair systems specifically at telomeric loci, leading to cell cycle arrest, senescence or cell death. Over-expression of TRF2 was observed in a variety of human cancers, suggesting TRF2's roles in tumorigenesis.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Full length TRF2 protein produced in baculovirus.
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C.
Application	WB - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by Western blotting . For Western blotting, the suggested use of this reagent is 0.25 - 2.0 µg per ml. It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes	TRF2 has 6 isoforms. Clone T2JKM3 recognizes multiple isoforms based on the homology of immunogen sequence. Clone T2JKM3 does not cross-react with mouse (in-house tested).
RRID	AB_2632764 (BioLegend Cat. No. 692402)

Antigen Details

Structure	542 amino acids with a predicted molecular weight of 59.6 kD.
Distribution	Nucleus.
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.
Interaction	Homodimer. Component of the shelterin complex (telosome) composed of TERF1, TERF2, TIN2, TERF2IP/RAP1, ACD and POT1. Interacts with TERF2IP, NBN, SLX4/BTBD12, DCLRE1B/Apollo and TERF2IP/RAP1.
Biology Area	Cell Biology, Cell Cycle/DNA Replication, DNA Repair/Replication

Antigen References

1. Griffith JD, *et al.* 1999. *Cell*. 97:503.
2. van Steensel B, *et al.* 1998. *Cell*. 92:401.
3. Palm W, de Lange T. 2008. *Annu. Rev. Genet.* 42:301.
4. Billaud T, *et al.* 1997. *Nat. Genet.* 17:236.
5. Sfeir A, de Lange T. 2012. *Science* 336:593.
6. Bellon M, *et al.* 2006. *Int. J. Cancer* 119:2090.
7. Benhamou Y, *et al.* 2016. *Oncotarget*. doi: 10.18632/oncotarget.10005.

Gene ID

[7014](#)

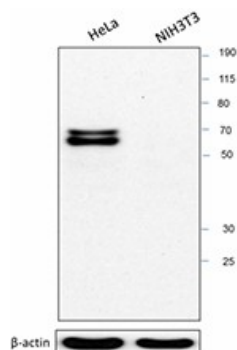
Related Protocols

[Western Blotting Protocol](#)

Other Formats

Purified anti-TRF2

Product Data



Total protein extracts (15 µg protein) from HeLa and NIH3T3 were resolved by 4-12% Bis-tris gel electrophoresis, transferred to nitrocellulose, and probed with 1 µg/mL purified anti-TRF2 (clone T2JKM3) antibody. Proteins were visualized using a goat anti-mouse-IgG secondary antibody conjugated to HRP and chemiluminescence detection. Direct-Blot™ HRP anti-β-actin (clone 2F1-1) antibody was used as a loading control.

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