

Product datasheet for TA336371

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

TRF2 (TERF2) Mouse Monoclonal Antibody [Clone ID: 4A794.15]

Product data:

Product Type: Primary Antibodies

Clone Name: 4A794.15

Applications: ChIP, CyTOF-ready, ELISA, FC, ICC/IF, IHC, Immunoblotting, IP, Simple Western, WB

Recommended Dilution: Chromatin Immunoprecipitation (ChIP): 1:10-1:500, Immunoblotting, Western Blot: 2-4 ug/ml,

ELISA: 2 ug/ml, Immunohistochemistry-Frozen: 5 ug/ml, Immunohistochemistry-Paraffin, Simple Western: 1:50, Flow Cytometry: 0.1 ug/10^6 cells, Immunohistochemistry: 1:10 - 1:500, Immunocytochemistry/ Immunofluorescence: 1:10 - 1:500, Immunoprecipitation: 2 ug/10^6

cells, CyTOF-ready, Proximity Ligation Assay

Reactivity: Human, Mouse, Rat

Host: Mouse

Isotype: IgG1, kappa
Clonality: Monoclonal

Immunogen: Baculovirus expressed whole length TRF2 protein was used for immunizing mice and

splenocytes used to generate the hybridoma clone (NP 005643).

Formulation: PBS containing 0.05% BSA, 0.05% Sodium Azide. Store at 4C short term. Aliquot and store at -

20C long term. Avoid freeze-thaw cycles.

Concentration: lot specific

Purification: Protein G purified

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Predicted Protein Size: 55.55 kDa

Gene Name: telomeric repeat binding factor 2

Database Link: NP 005643

Entrez Gene 21750 MouseEntrez Gene 361403 RatEntrez Gene 7014 Human

Q15554





Background:

TRF2 is a ubiquitously expressed protein that is implicated in the control of telomere length (1). TRF2, like TRF1 contains a Myb-related DNA binding motif. It binds to duplex TTAGGG repeats and is localized to all human telomeres in metaphase chromosomes (1). TRF2 is thought to protect chromosome ends by maintaining the correct structure at telomere termini (2). The use of mutant forms of TRF2 has implicated a role for TRF2 in the prevention of senescence in primary human cells (2). Recently, it has been shown that inhibition of TRF2 resulted in apoptosis in a subset of mammalian cell types (3)

Synonyms:

TRBF2; TRF2

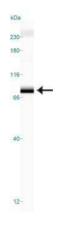
Note:

1. TLR2 may be detected as a single band or as a doublet in western blot. Okabe (2000) described the doublet as 65 and 69 kDa using clone 4A794.15. However, observed molecular weights could vary depending on molecular weight standards used and gel conditions. 2. The TRF2 antibody is referred to as both clone 4A794.15 and 4A794 in the published literature. 3. The TRF2 antibody recognizes full-length TRF2 as well as TRF2 forms lacking both the N-terminal basic domain (B) and the telobox Myb-like C-terminal DNA-binding domain (M). TRF2 forms missing the B and M domains are often referred to as mutant TRF2. Refer to the published literature for additional information. 4. Although the exact epitope recognized by the TRF2 antibody has not been mapped, the scientific literature indicates it is in the D or L domain, but not in the B or M domain.

Protein Families:

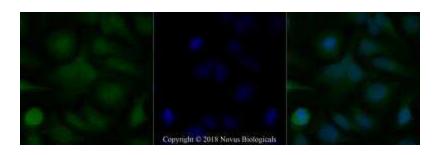
Transcription Factors

Product images:

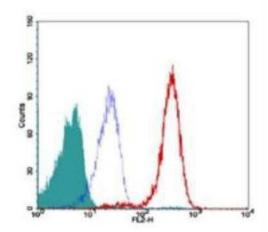


Simple Western: TRF-2 Antibody (4A794.15) TA336371 - Image shows a specific band for TRF2 in 1.0 mg/mL of HeLa lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system. Non-specific interaction with the 230 kDa Simple Western standard may be seen with this antibody.

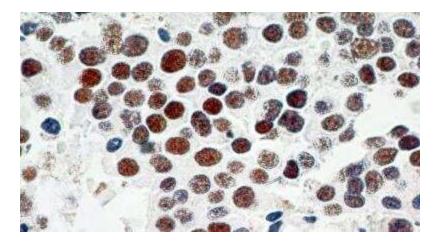




Immunocytochemistry/Immunofluorescence: TRF-2 Antibody (4A794.15) TA336371 - HeLa cells were fixed for 10 minutes using 10% formalin and then permeabilized for 5 minutes using 1X PBS + 0.5% Triton-X100. The cells were incubated with anti-TRF-2 (4A794.15) conjugated to FITC [TA336371F] at 5 ug/mL for 1 hour at room temperature. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 40X objective.

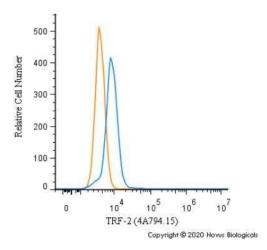


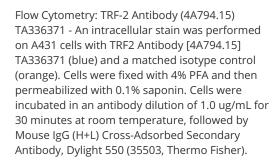
Flow Cytometry: TRF-2 Antibody (4A794.15) TA336371 - Intracellular flow cytometric analysis of TRF2 in 10^6 human Jurkat cells using 0.1 ug of TA336371. The shaded histogram represents cells alone, blue represents isotype control and red represents TA336371, anti-TRF2.

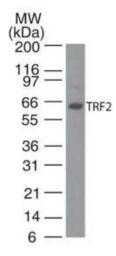


Immunohistochemistry-Paraffin: TRF-2 Antibody (4A794.15) TA336371 - Transitional cell carcinoma, urinary bladder, stained with TRF2 antibody (4 ug/mL), peroxidase-conjugate and DAB chromogen. Note specific nuclear staining. Tumor/normal adjacent tissue array slide was used for this test. Staining of formalin-fixed tissues is enhanced by boiling tissue sections in 10 mM sodium citrate buffer, pH 6.0 for 10-20 min followed by cooling at RT for 20 min.

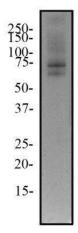








Western Blot: TRF-2 Antibody (4A794.15)
TA336371 - Analysis in human Jurkat cell lysate at 2 ug/mL. Goat anti-mouse lg HRP secondary antibody and PicoTect ECL substrate solution were used.



Western Blot: TRF-2 Antibody (4A794.15) TA336371 - Total protein from mouse 3T3 cells was separated on a 12% gel by SDS-PAGE, transferred to PVDF membrane and blocked in 5% non-fat milk in TBST. The membrane was probed with 2.0 ug/mL anti-TRF2 in 1% non-fat milk in TBST and detected with an anti-mouse HRP secondary antibody using chemiluminescence.