abcam

Product datasheet

Anti-TRF1 antibody [EPR6313] ab129177

Recombinant RabMAb

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Overview

Product name Anti-TRF1 antibody [EPR6313]

Description Rabbit monoclonal [EPR6313] to TRF1

Host species Rabbit

Suitable for: WB **Tested applications**

Unsuitable for: ICC/IF

Species reactivity Reacts with: Mouse, Human

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: K562 cell lysate, 293T cell lysate, Caco 2 cell lysate, HeLa whole cell lysate (ab150035).,

HEK-293 cell lysate, Mouse 14 day embryo lysates;

General notes This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity - Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

Rat: We have preliminary internal testing data to indicate this antibody may not react with this

species. Please contact us for more information.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Stable for 12 months at -20°C.

Storage buffer pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

Purity Protein A purified

Clonality Monoclonal
Clone number EPR6313
Isotype IqG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab129177 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000 - 1/10000. Detects a band of approximately 60 kDa (predicted molecular weight: 50 kDa).

Application notes Is unsuitable for ICC/IF.

Target

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.

Tissue specificity Highly expressed and ubiquitous. Isoform Pin2 predominates.

Sequence similarities Contains 1 HTH myb-type DNA-binding domain.

Domain The acidic N-terminal domain binds to the ankyrin repeats of TNKS1 and TNKS2. The C-terminal

domain binds microtubules.

The TRFH dimerization region mediates the interaction with TINF2.

Post-translational modifications

Phosphorylated preferentially on Ser-219 in an ATM-dependent manner in response to ionizing

DNA damage.

ADP-ribosylation by TNKS1 or TNKS2 diminishes its ability to bind to telomeric DNA.

Ubiquitinated by RLIM/RNF12, leading to its degradation by the proteasome. Ubiquitinated by a SCF (SKP1-CUL1-F-box protein) ubiquitin-protein ligase complex, leading to its degradation by

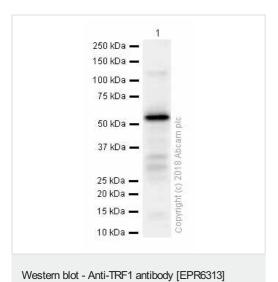
the proteasome.

Cellular localization Nucleus. Cytoplasm > cytoskeleton > spindle. Chromosome > telomere. Colocalizes with

telomeric DNA in interphase and metaphase cells and is located at chromosome ends during

metaphase. Associates with the mitotic spindle.

Images



(ab129177)

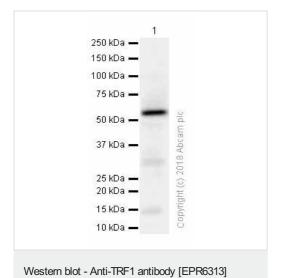
(ab129177)

Anti-TRF1 antibody [EPR6313] (ab129177) at 1/1000 dilution (Purified) + Mouse 14 day embryo lysates at 15 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/10000 dilution

Predicted band size: 50 kDa **Observed band size:** 60 kDa

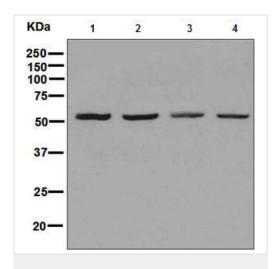


Anti-TRF1 antibody [EPR6313] (ab129177) at 1/1000 dilution (Purified) + HEK-293 (Human embryonic kidney epithelial cell) whole cell lysates at 15 μ g

Secondary

Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 50 kDa **Observed band size:** 60 kDa



Western blot - Anti-TRF1 antibody [EPR6313] (ab129177)

All lanes : Anti-TRF1 antibody [EPR6313] (ab129177) at 1/1000 dilution (Unpurified)

Lane 1 : K562 (human chronic myelogenous leukemia cell line from bone marrow) cell lysate

Lane 2: HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) cell lysate

Lane 3 : Caco-2 (Human colorectal adenocarcinoma cell line) cell lysate

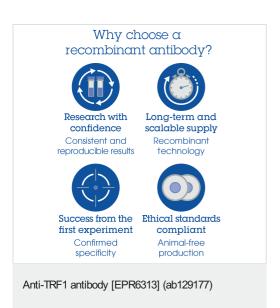
Lane 4: HeLa (human epithelial cell line from cervix adenocarcinoma) cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat anti-rabbit HRP conjugated antibody at 1/2000 dilution

Predicted band size: 50 kDa **Observed band size:** 60 kDa



Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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