

Datasheet: MCA2643GA

Description:	MOUSE ANTI HUMAN TRF1
Specificity:	TRF1
Other names:	TERF1
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	BED5
Isotype:	IgG1
Quantity:	0.1 mg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen	▪			
Immunohistology - Paraffin (1)	▪			1/200 - 1/1000
ELISA	▪			
Immunoprecipitation			▪	
Western Blotting	▪			

The PrecisionAb label is reserved for antibodies that meet the defined performance criteria within Bio-Rad's ongoing antibody validation programme. Click [here](#) to learn how we validate our PrecisionAb range. Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

(1)This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. Sodium citrate buffer pH 6.0 is recommended for this purpose.

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture

supernatant

Buffer Solution Phosphate buffered saline

Preservative Stabilisers 0.09% Sodium Azide (NaN₃)

Carrier Free Yes

Approx. Protein Concentrations IgG concentration 1.0mg/ml

Immunogen Recombinant TRF1.

External Database Links

UniProt:
[P54274](#) [Related reagents](#)

Entrez Gene:
[7013](#) TERF1 [Related reagents](#)

Synonyms PIN2, TRBF1, TRF, TRF1

RRID AB_2201462

Specificity

Mouse anti human TRF1 antibody, clone BED5 recognizes TTAGGG repeat binding factor 1 (TRF1) a ubiquitously expressed 60kDa protein. Along with tankyrase-1, TIN2, and PINX1, TRF1 binds the double-stranded TTAGGG repeat of telomeres and regulates telomere length. Protection of telomeres-1 (POT1) is a single-stranded telomeric DNA-binding protein which controls the elongation of telomeres by telomerase. TRF1 mediates the loading of POT1 onto single stranded DNA, conveying information about telomere length to the telomere terminus, where telomerase is regulated. If the telomere is long enough, telomerase is inhibited. Additionally in conjunction with POT1 and TTAGGG repeat binding factor 1 (TRF2), TRF1 recruits factors to the telomere, inducing the formation of the protective t-loop. TRF1 along with TRF2, POT1, TIN2, TPP1, and Rap1 form the shelterin complex which distinguishes telomeres from sites of DNA damage.

TRF1 is thought to play a role in leukaemia being expressed at significantly higher levels in patients with acute lymphoblastic leukaemia than those with myeloid leukaemia ([Ohyashiki *et al.* 2001](#)).

Mouse anti human TRF1 antibody, clone BED5 has been reported to work in western blotting applications.

Histology Positive Control Tissue Human tonsil

References 1. Galati, A. *et al.* (2006) The human telomeric protein TRF1 specifically recognizes nucleosomal binding sites and alters nucleosome structure. [J Mol Biol. 360 \(2\): 377-85.](#)

2. de Lange, T. (2005) Shelterin: the protein complex that shapes and safeguards human telomeres. [Genes Dev. 19 \(18\): 2100-10.](#)

Storage This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee 12 months from date of despatch

Acknowledgements PrecisionAb is a trademark of Bio-Rad Laboratories

Health And Safety Information Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2643GA>
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Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...) [HRP](#)
Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
Goat Anti Mouse IgG (STAR70...) [FITC](#)
Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)
Goat Anti Mouse IgG (STAR76...) [RPE](#)
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®550](#),
[DyLight®650](#), [DyLight®680](#), [DyLight®800](#),
[FITC](#), [HRP](#)
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

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