

Datasheet: MCA2643GA

Description:	ription: MOUSE ANTI HUMAN TRF1	
Specificity:	TRF1	
Other names:	TERF1	
Format:	Purified	
Product Type:	Monoclonal Antibody	
Clone:	BED5	
Isotype:	lgG1	
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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	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. Learn about <a href="https://www.wevalidate.our.org/learn-about-how">how</a> we validate our PrecisionAb range. Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Further optimization may be required dependent on sample type.

(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 supernatant	A from tissue culture
Buffer Solution	Phosphate buffered saline	

Preservative Stabilisers	0.09% Sodium Azide (NaN <sub>3</sub> )	
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. <i>et al.</i> (2006) The human telomeric protein TRF1 specifically recognizes nucleosomal binding sites and alters nucleosome structure. <u>J Mol Biol. 360 (2): 377-85.</u> 2. de Lange, T. (2005) Shelterin: the protein complex that shapes and safeguards human telomeres. <u>Genes Dev. 19 (18): 2100-10.</u>	
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: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2643GA">https://www.bio-rad-antibodies.com/SDS/MCA2643GA</a>
Regulatory	For research purposes only

### Related Products

# **Recommended Secondary Antibodies**

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

## **Recommended Negative Controls**

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

Product inquiries: www.bio-rad-antibodies.com/technical-support

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M443156:250709'

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