

## Product datasheet for **AM05622PU-N**

### TRF1 (TERF1) Mouse Monoclonal Antibody [Clone ID: BED5]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	BED5
Applications:	ELISA, IHC, WB
Recommended Dilution:	<b>ELISA.</b> <b>Western Blot:</b> Detects a band of approximately 60kDa in Jurkat whole cell lysates. <b>Immunohistochemistry on Frozen Sections.</b> <b>Immunohistochemistry on Paraffin Sections:</b> 1/200-1/1000. Requires antigen retrieval using heat treatment prior to staining of paraffin sections. Sodium citrate buffer pH 6.0 is recommended for this purpose.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Recombinant TRF1
Specificity:	This antibody recognizes TTAGGG repeat binding factor 1 (TRF1) a ubiquitously expressed 60kDa protein.
Formulation:	PBS pH 7.4 containing 0.09% Sodium Azide as preservative State: Purified State: Liquid purified IgG fraction
Concentration:	lot specific
Purification:	Affinity chromatography on Protein G
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	telomeric repeat binding factor 1
Database Link:	<a href="#">Entrez Gene 7013 Human P54274</a>



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**Background:**

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.

**Synonyms:**

PIN2, TRBF1, TRF, TRF1