

Human TRF-1 Antibody

Antigen Affinity-purified Polyclonal Sheep IgG Catalog Number: AF5300

DESCRIPTION		
Species Reactivity	Human	
Specificity	Detects human TRF-1 in Western blots.	
Source	Polyclonal Sheep IgG	
Purification	Antigen Affinity-purified	
Immunogen	<i>E. coli</i> -derived recombinant human TRF-1 Lys136-Lys295 Accession # P54274	
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.	

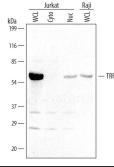
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	1 μg/mL	See Below

DATA





Detection of Human TRF-1 by Western Blot. Western blot shows lysates of Jurkat human leukemic T cell line and Raji human Burkitt's lymphoma cell line. Gels were loaded with 30 μg of whole cell lysate (WCL), 20 μg of cytoplasmic (Cyto), and 10 μg of nuclear extracts (Nuc). PVDF membrane was probed with 1 μg/mL Sheep Anti-Human TRF-1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5300) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band for TRF-1 was detected at approximately 60 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

PREPARATION AND STORAGE

Reconstitution Reconstitute at 0.2 mg/mL in sterile PBS.

Shipping The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C

Stability & Storage Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution
- 6 months, -20 to -70 °C under sterile conditions after reconstitution

BACKGROUND

TRF-1 (telomeric repeat-binding factor 1; also Pin2) is a nuclear protein that participates in telomere homeostasis. Although its predicted molecular weight is 50 kDa, it runs anomalously at 60 kDa in SDS-PAGE. TRF-1 binds as a dimer to the ends of chromosomes (telomeres), where it blocks telomerase activity, promoting normal cell senescence and turnover. Human TRF-1 is 439 amino acids (aa) in length. It contains an N-terminal acidic region (aa 2-64), a dimerization domain (aa 65-265), an NLS (aa 337-356), and a DNA binding HTH myb-type domain (aa 375-432). Phosphorylation of TRF-1 at Ser435 mediates its binding to DNA. One alternate splice form shows a deletion of aa 295-315 that may be accompanied by a 36 aa N-terminal extension. Over aa 136-295, human TRF-1 shares 72% aa identity with mouse TRF-1.

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