

### Certificate of Analysis

**Product:** Affinity Purified Anti-Telomerase associated protein 1 (TEP1) [Rabbit]

**Code:** 600-401-A63

**Lot #** 999541

**Size:** 100 µg

**Physical State:** Liquid (sterile filtered)

**Antibody Concentration:** 1.0 mg/ml (by UV absorbance at 280 nm)

**Buffer:** 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

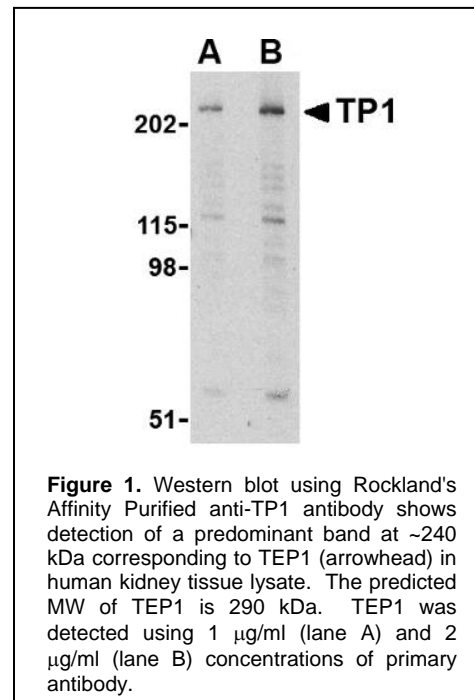
**Stabilizer:** None

**Preservative:** 0.02% (w/v) Sodium Azide

**Storage Conditions:** Store vial at -20° C prior to opening. Dilute only prior to immediate use. For extended storage, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Expiration date is one (1) year from date of opening.

**Background:** Telomerase is an RNA-dependent DNA polymerase that uses an RNA component to add telomeric repeat sequences at the ends of chromosomes. Besides the RNA component which serves as the template that specifies the telomeric repeat, the telomerase complex contains a reverse transcriptase protein (TRT) and various accessory proteins including the telomerase-associated protein 1 (TP1). Telomerase activity is low in most somatic cells, causing the gradual shortening of telomeres which can ultimately lead to telomere fusion and cell death. High levels of telomerase activity are widely seen in cancerous cells and while recent experiments have suggested that telomerase may be a viable target in cancer therapy, expression levels of TP1 do not correlate with malignancy. At least two isoforms of TP1 are known to exist.

**Application Note(s):** This affinity purified antibody has been tested for use in ELISA and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band at ~240 kDa in size corresponding to TEP1 by western blotting in the appropriate cell lysate or extract. Human kidney tissue lysate can be used as positive control.



<b>Recommended Dilutions:</b>	<b>ELISA</b>	1:10,000 - 1:40,000
	<b>WESTERN BLOT</b>	1 -2 µg/ml
	<b>IF MICROSCOPY</b>	User Optimized
	<b>OTHER APPLICATIONS</b>	User Optimized

**Purity and Specificity:** This affinity purified antibody is directed against human TEP1 protein. The product was affinity purified from monospecific antiserum by immunoaffinity chromatography. A BLAST analysis was used to suggest that this antibody would react with TEP1 from human, mouse and rat sources.

**Relevant Link(s):** Swiss-Prot [Q99973](http://www.uniprot.org/entry/Q99973)

NCBI Link [NP\\_009041](http://www.ncbi.nlm.nih.gov/nuccore/NP_009041)

**Immunogen:** This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to a region near the amino terminus of human telomerase associated protein 1 (TEP1).

#### General References:

Greider CW. Telomere length regulation. *Annu. Rev. Biochem.* 1996; **274**:92-7.

Cong YS, Wright WE, and Shay JW. Human telomerase and its regulation. *Microbiol. Mol. Biol. Rev.* 2002; **66**:407-25.

Harrington L, McPhail T, Mar V, et al. A mammalian telomerase-associated protein. *Science* 1997; **275**:973-7.

Wong JMY and Collins K. Telomere maintenance and disease. *Lancet* 2003; **362**:983-8.

Cunningham AP, Love WK, Zhang RW, et al. Telomerase inhibition in cancer therapeutics: molecular-based approaches. *Curr. Med. Chem.* 2006; **13**:2875-88.

Hu S, Chan HL, Chen MC, et al. Telomerase expression in benign and malignant skin neoplasms: comparison of three major subunits. *J. Formos. Med. Assoc.* 2002; **101**:593-7.

#### Related Products:

# <a href="#">W09-000-364</a>	HeLa Whole Cell Lysate in SDS-PAGE Sample Buffer
# <a href="#">W09-000-365</a>	293 Whole Cell Lysate in SDS-PAGE Sample Buffer
# <a href="#">W09-001-370</a>	Jurkat Whole Cell Lysate in SDS-PAGE Sample Buffer
# <a href="#">611-703-127</a>	Peroxidase Conjugated Affinity Purified Anti-RABBIT IgG (H&L) (DONKEY) MX10
# <a href="#">611-132-122</a>	IRDye® 800 Conjugated Affinity Purified Anti-RABBIT IgG (H&L) (GOAT) MX10
# <a href="#">B501-0500</a>	BLOTTO (500 g)
# <a href="#">BSA-30</a>	30% BOVINE SERUM ALBUMIN SOL'N in 0.85% sodium chloride (no preservative or stabilizer) (500 ml)
# <a href="#">B304</a>	NORMAL GOAT SERUM (NGS) (10 ml)
# <a href="#">KIA-003</a>	<b>MaxTag™</b> Anti-RABBIT IgG Kit for Immunoblotting
# <a href="#">MB-070</a>	Blocking Buffer for Fluorescent Western Blotting

**Note:** This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information.

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