

**Anti-Telomerase Antibody**  
Rabbit polyclonal antibody to Telomerase  
Catalog # AP59941

**Specification**

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**Anti-Telomerase Antibody - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">O14746</a>
Other Accession	<a href="#">O70372</a>
Reactivity	<b>Human, Mouse, Rat, Monkey</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Calculated MW	<b>126997</b>

**Anti-Telomerase Antibody - Additional Information**

**Gene ID** 7015

**Other Names**

EST2; TCS1; TRT; Telomerase reverse transcriptase; HEST2; Telomerase catalytic subunit; Telomerase-associated protein 2; TP2

**Target/Specificity**

Recognizes endogenous levels of Telomerase protein.

**Dilution**

WB~~WB (1/500 - 1/1000)

**Format**

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

**Storage**

Store at -20 °C. Stable for 12 months from date of receipt

**Anti-Telomerase Antibody - Protein Information**

**Name** TERT

**Synonyms** EST2, TCS1, TRT

**Function**

Telomerase is a ribonucleoprotein enzyme essential for the replication of chromosome termini in most eukaryotes. Active in progenitor and cancer cells. Inactive, or very low activity, in normal somatic cells. Catalytic component of the telomerase holoenzyme complex whose main activity is the elongation of telomeres by acting as a reverse transcriptase that adds simple sequence repeats to chromosome ends by copying a template sequence within the RNA component of the enzyme. Catalyzes the RNA-dependent extension of 3'-chromosomal termini with the 6-nucleotide

telomeric repeat unit, 5'-TTAGGG-3'. The catalytic cycle involves primer binding, primer extension and release of product once the template boundary has been reached or nascent product translocation followed by further extension. More active on substrates containing 2 or 3 telomeric repeats. Telomerase activity is regulated by a number of factors including telomerase complex-associated proteins, chaperones and polypeptide modifiers. Modulates Wnt signaling. Plays important roles in aging and antiapoptosis.

#### Cellular Location

Nucleus, nucleolus. Nucleus, nucleoplasm. Nucleus. Chromosome, telomere. Cytoplasm Nucleus, PML body. Note=Shuttling between nuclear and cytoplasm depends on cell cycle, phosphorylation states, transformation and DNA damage Diffuse localization in the nucleoplasm. Enriched in nucleoli of certain cell types. Translocated to the cytoplasm via nuclear pores in a CRM1/RAN-dependent manner involving oxidative stress-mediated phosphorylation at Tyr-707. Dephosphorylation at this site by SHP2 retains TERT in the nucleus. Translocated to the nucleus by phosphorylation by AKT

#### Tissue Location

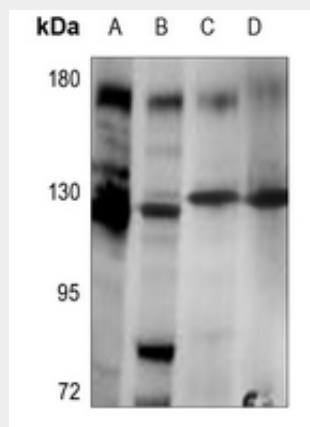
Expressed at a high level in thymocyte subpopulations, at an intermediate level in tonsil T-lymphocytes, and at a low to undetectable level in peripheral blood T-lymphocytes

### Anti-Telomerase Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Anti-Telomerase Antibody - Images



Western blot analysis of Telomerase expression in SP20 (A), C6 (B), HCT116 (C), HUT78 (D) whole cell lysates.

### Anti-Telomerase Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human

Telomerase. The exact sequence is proprietary.