

**TERT (aa597-611) Antibody (internal region)**  
Peptide-affinity purified goat antibody  
Catalog # AF3695a

**Specification**

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**TERT (aa597-611) Antibody (internal region) - Product Information**

Application	WB
Primary Accession	<a href="#">O14746</a>
Other Accession	<a href="#">NP_937983.2</a> , <a href="#">NP_001180305.1</a> , <a href="#">7015</a>
Reactivity	Human
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
Isotype	IgG
Calculated MW	126997

**TERT (aa597-611) Antibody (internal region) - Additional Information**

**Gene ID** 7015

**Other Names**

Telomerase reverse transcriptase, 2.7.7.49, HEST2, Telomerase catalytic subunit, Telomerase-associated protein 2, TP2, TERT, EST2, TCS1, TRT

**Format**

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

TERT (aa597-611) Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

**TERT (aa597-611) Antibody (internal region) - 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

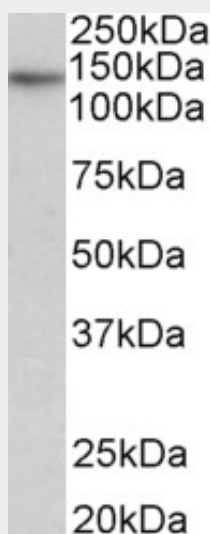
Expressed at a high level in thymocyte subpopulations, at an intermediate level in tonsil T-lymphocytes, and at a low to undetectable level in peripheral blood T-lymphocytes

#### TERT (aa597-611) Antibody (internal region) - 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](#)

#### TERT (aa597-611) Antibody (internal region) - Images



AF3695a (0.5 µg/ml) staining of Human Skeletal Muscle lysate (35 µg protein in RIPA buffer).

Primary incubation was 1 hour. Detected by chemiluminescence.

**TERT (aa597-611) Antibody (internal region) - Background**

This antibody is expected to recognize both reported isoforms (NP\_937983.2; (NP\_001180305.1).

**TERT (aa597-611) Antibody (internal region) - References**

Identification of PITX1 as a TERT suppressor gene located on human chromosome 5. Qi DL, Ohhira T, Fujisaki C, Inoue T, Ohta T, Osaki M, Ohshiro E, Seko T, Aoki S, Oshimura M, Kugoh H. Mol Cell Biol. 2011 Apr;31(8):1624-36. PMID: 21300782