

### **TERT Antibody**

Rabbit mAb Catalog # AP90196

# **Specification**

### **TERT Antibody - Product Information**

Application WB, IP
Primary Accession O14746
Clonality Monoclonal

**Other Names** 

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

Telomerase catalytic subunit;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 126997 Da

# **TERT Antibody - Additional Information**

Dilution **WB~~1:1000** 

IP~~N/A

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

**TERT** 

Description 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 teleromerase 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. 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. Rabbit IgG in phosphate buffered saline,

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

## **TERT Antibody - Protein Information**

Storage Condition and Buffer



### **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 teleromerase 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 Antibody - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## **TERT Antibody - Images**



