

## **Product datasheet for TA336564**

## OriGene Technologies, Inc.

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## Telomerase reverse transcriptase (TERT) Rabbit Polyclonal Antibody

**Product data:** 

**Product Type:** Primary Antibodies

Applications: IF, WB

Recommended Dilution: WB: 0.5 ug/ml, IF: 1:50-1:100

Reactivity: Human, Mouse

**Host:** Rabbit

Clonality: Polyclonal

**Immunogen:** Synthetic peptide made to an internal portion of human Telomerase reverse transcriptase

(within residues 900-950). [Swiss-Prot# O14746]

**Formulation:** Tris-citrate/phosphate, pH 7, 0.1% Sodium azide. Store at 4C. Do not freeze.

**Concentration:** lot specific

**Purification:** Immunogen affinity purified

Conjugation: Unconjugated

**Storage:** Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

**Predicted Protein Size:** 120 kDa

**Gene Name:** telomerase reverse transcriptase

Database Link: NP 937983

Entrez Gene 21752 MouseEntrez Gene 7015 Human

O14746





Background:

Telomerase reverse transcriptase (TERT) is a ribonucleoprotein enzyme essential for eukaryotic chromosomal termini replication that is active in progenitor as well as cancer cells, and stays inactive or show very low activity in normal somatic cells. TERT is the catalytic component of the holoenzyme complex (TERT, DKC1, WDR79/TCAB1, NOP10, NHP2, GAR1, TEP1, EST1A, POT1 and TERC) that implicates in telomeres elongation by acting as a reverse transcriptase adding simple sequence repeats to chromosome ends by copying a template sequence within RNA component of the enzyme. For executing its versatile functions, TERT can interact with HSP90A, PTGES3, HSPA1A, RAN, XPO1, PTPN11, NCL, SMARCA4, MCRS1, PIF1, PML and GNL3L. TERT modulates Wnt signaling and plays important roles in aging and anti-apoptosis. Telomerase activation has been implicated in cell immortalization/carcinogenesis and defects in TERT are associated with susceptibilty to aplastic anemia, coronary artery disease (CAD), dyskeratosis congenita autosomal dominant type 2 (DKCA2), pulmonary fibrosis, and/or bone marrow failure, telomere-related, type 1 (PFBMFT1), dyskeratosis congenita autosomal recessive type 4 (DKCB4), susceptibility to pulmonary fibrosis idiopathic (IPF).

Synonyms: CMM9; DKCA2; DKCB4; EST2; hEST2; hTRT; PFBMFT1; TCS1; TP2; TRT

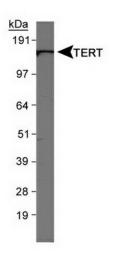
**Note:** This Telomerase reverse transcriptase antibody is useful in

Immunocytochemistry/Immunofluorescence and Western blot, where a band is seen at  $\sim$ 120 kDa. In ICC/IF, puncatate nuclear staining can be seen in V6.5 mouse embryonic stem cells

(Catalog No. NBP1-41162).

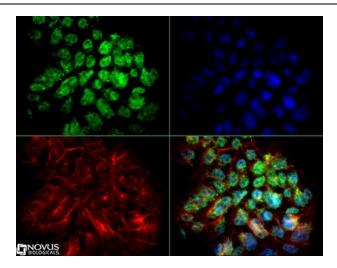
**Protein Families:** Druggable Genome

## **Product images:**



Western Blot: Telomerase reverse transcriptase Antibody TA336564 - Detection of Telomerase reverse transcriptase in HeLa nuclear extracts using TA336564.





Immunocytochemistry/Immunofluorescence: Telomerase reverse transcriptase Antibody TA336564 - The Telomerase reverse transcriptase antibody was tested in V6.5 mouse embryonic stem cells (cat# NBP1-41162) against Dylight 488. Actin and nuclei were counte