

TERT Polyclonal Antibody

Catalog No: YT5514

Reactivity: Human; Rat; Mouse;

Applications: WB;IHC;IF;ELISA

Target: TERT

Fields: >>Human papillomavirus infection;>>Human T-cell leukemia virus 1

infection;>>Pathways in cancer;>>Hepatocellular carcinoma;>>Gastric cancer

Gene Name: TERT

Protein Name: Telomerase reverse transcriptase

014746

070372

Human Gene Id: 7015

Human Swiss Prot

No:

Mouse Swiss Prot

No:

Immunogen: The antiserum was produced against synthesized peptide derived from the C-

terminal region of human TERT. AA range:931-980

Specificity: TERT Polyclonal Antibody detects endogenous levels of TERT protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution : WB 1:500 - 1:2000. IHC: 1:100-1:300. ELISA: 1:20000.. IF 1:50-200

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

1/3



Observed Band: 130kD

Background:

Telomerase is a ribonucleoprotein polymerase that maintains telomere ends by addition of the telomere repeat TTAGGG. The enzyme consists of a protein component with reverse transcriptase activity, encoded by this gene, and an RNA component which serves as a template for the telomere repeat. Telomerase expression plays a role in cellular senescence, as it is normally repressed in postnatal somatic cells resulting in progressive shortening of telomeres. Deregulation of telomerase expression in somatic cells may be involved in oncogenesis. Studies in mouse suggest that telomerase also participates in chromosomal repair, since de novo synthesis of telomere repeats may occur at double-stranded breaks. Alternatively spliced variants encoding different isoforms of telomerase reverse transcriptase have been identified; the full-length sequence of some variants has not been determined. Alternative sp

Function:

catalytic activity:Deoxynucleoside triphosphate + DNA(n) = diphosphate + DNA(n+1)., disease:Activation of telomerase has been implicated in cell immortalization and cancer cell pathogenesis., disease:Defects in TERT are a cause of dyskeratosis congenita autosomal dominant (ADDKC) [MIM:127550]; also known as dyskeratosis congenita Scoggins type. ADDKC is a rare, progressive bone marrow failure syndrome characterized by the triad of reticulated skin hyperpigmentation, nail dystrophy, and mucosal leukoplakia. Early mortality is often associated with bone marrow failure, infections, fatal pulmonary complications, or malignancy., disease:Defects in TERT are associated with susceptibilty to aplastic anemia (AA) [MIM:609135]. AA is a rare disease in which the reduction of the circulating blood cells results from damage to the stem cell pool in bone marrow. In most patients, the stem cell lesion is

Subcellular Location:

Nucleus, nucleolus . Nucleus, nucleoplasm. Nucleus. Chromosome, telomere. Cytoplasm. Nucleus, PML body. 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.

Expression:

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.

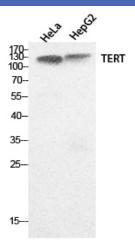
Sort : 17045

No4:

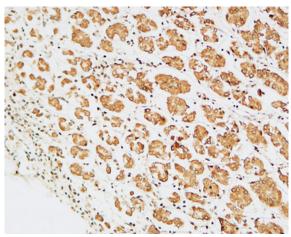
Host: Rabbit

Modifications: Unmodified

Products Images



Western Blot analysis of HeLa, HepG2 cells using TERT Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded Human stomach. 1, Antibody was diluted at 1:100(4° overnight). 2, Highpressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).