Product Name: TERT Rabbit Polyclonal Antibody
Catalog #: APRab18799

Summary

Production Name	TERT Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,IHC,IF,ELISA
Reactivity	Human,Rat,Mouse

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	TERT
Alternative Names	TERT; EST2; TCS1; TRT; Telomerase reverse transcriptase; HEST2; Telomerase catalytic subunit; Telomerase-associated protein 2; TP2
Gene ID	7015.0
SwissProt ID	O14746.The antiserum was produced against synthesized peptide derived from the C-terminal region of human TERT. AA range:931-980

Application

Dilution Ratio	WB 1:500 - 1:2000. IHC-p: 1:100-1:300. ELISA: 1:20000.. IF 1:50-200
Molecular Weight	130kD

Product Name: TERT Rabbit Polyclonal Antibody
Catalog #: APRab18799

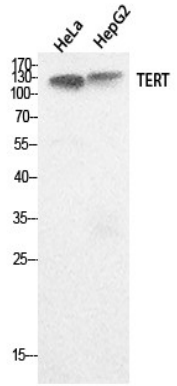
Background

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 spcatalytic 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 caused by an autoimmune attack. T-lymphocytes, activated by an endogenous or exogenous, and most often unknown antigenic stimulus, secrete cytokines, including IFN-gamma, which would in turn be able to suppress hematopoiesis.,disease:Defects in TERT increases susceptibility to idiopathic pulmonary fibrosis [MIM:178500]. Idiopathic pulmonary fibrosis is an adult-onset, lethal, scarring lung disease of unknown etiology. Its clinical features are shortness of breath, radiographically evident diffuse pulmonary infiltrates, and varying degrees in inflammation, fibrosis, or both on biopsy. It is rapidly progressive and characterized by sequential acute lung injury with subsequent scarring and endstage lung disease.,disease:Genetic variations in TERT are associated with coronary artery disease (CAD).,function:Telomerase is a ribonucleoprotein enzyme essential for the replication of chromosome termini in most eukaryotes. It elongates telomeres. It is a reverse transcriptase that adds simple sequence repeats to chromosome ends by copying a template sequence within the RNA component of the enzyme.,similarity:Belongs to the reverse transcriptase family. Telomerase subfamily.,similarity:Contains 1 reverse transcriptase domain.,subunit:Catalytic subunit of the telomerase holoenzyme complex at least composed of TERT, DKC1, WDR79/TCAB1, NOP10, NHP2, GAR1, TEP1, EST1A, POT1 and a telomerase RNA template component (TERC). Interacts with PINX1 and MCRS1.,

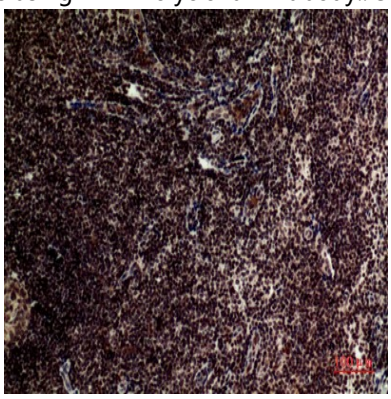
Research Area

Image Data

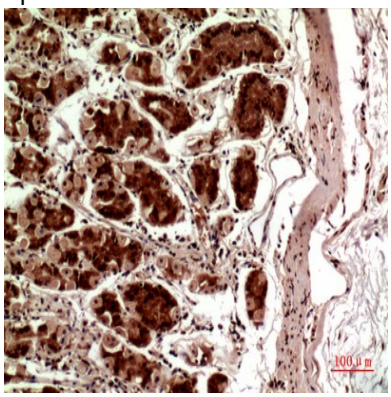
Product Name: TERT Rabbit Polyclonal Antibody
Catalog #: APRab18799



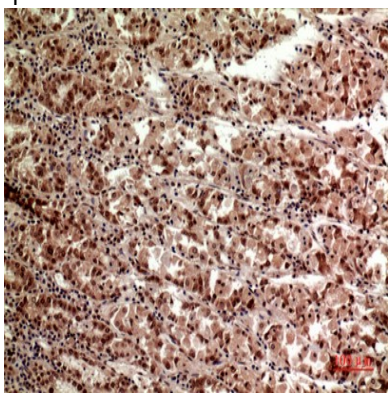
Western Blot analysis of HeLa, HepG2 cells using TERT Polyclonal Antibody.. Secondary antibody was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded human-tonsilla, antibody was diluted at 1:100

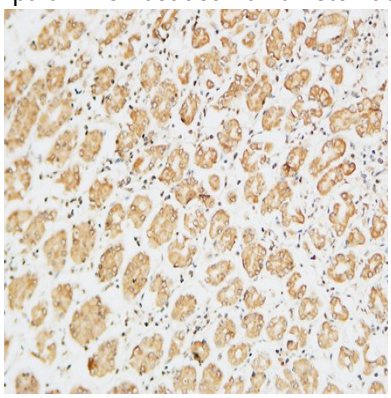


Immunohistochemical analysis of paraffin-embedded human-stomach, antibody was diluted at 1:100

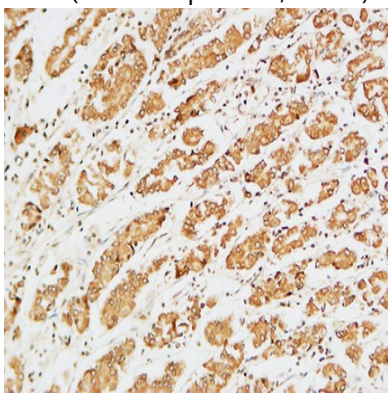


Product Name: TERT Rabbit Polyclonal Antibody
Catalog #: APRab18799

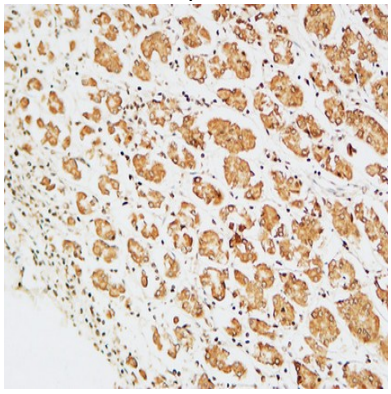
Immunohistochemical analysis of paraffin-embedded human-stomach, antibody was diluted at 1:100



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



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



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

Product Name: TERT Rabbit Polyclonal Antibody
Catalog #: APRab18799

Note

For research use only.