

Telomerase reverse transcriptase

Catalog No: #AP79299



Package Size: #AP79299-1 50ug #AP79299-2 100ug #AP79299-3 1mg

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Description

| | |
|-----------------------|---|
| Product Name | Telomerase reverse transcriptase |
| Brief Description | Recombinant Protein |
| Host Species | E.coli |
| Purification | Greater than 90% by SDS-PAGE |
| Species Reactivity | Human |
| Immunogen Description | 376-521AA |
| Other Names | EST2,TCS1,TRT,HEST2,Telomerase catalytic subunit,Telomerase-associated protein 2,TP2 |
| Accession No. | O14746Gene name:TERT |
| Uniprot | O14746 |
| GeneID | 7015; |
| Calculated MW | 16.06 |
| Tag Info | His |
| Formulation | 50mM NaH ₂ PO ₄ , 500mM NaCl Buffer with 500mM Imidazole,10%glycerol(PH8.0) |
| Storage | Store at -20C. (Avoid repeated freezing and thawing.)Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week. |

Background

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.

References

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Note: This product is for in vitro research use only