

Product datasheet for **RN210889**

Tert (NM_053423) Rat Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tert (NM_053423) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Tert
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>RN210889 representing NM_053423 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCCCGCGCTCCTCGTTGCCCGCGCTGCGCTCTCTACTGCGCAGCCGATATCGGGAGGTGTGGCCGC
TGGCGACCTTTGTGCGCGCCTGGGGCTTGAGGGCAGTCGGCTTGTGCAACCCGGGACCCGAAGTCTT
CCGCACGTTGGTTGCCAGTGCCTAGTGTGCGTCCCTGGGGCTCACAGCCGCCACTGCTGACCTTCC
TCCACCAGGTGTATCCCTGAAAGAGCTGGTGTCCAGGGTTGTGCAGAACTTTGCGAGCGCGGTGAGA
GGAATGTGCTGGCTTTTGGCTTTGCACTGCTTAACGGGGCCAGAGGTGGGCTCCCATGGCCTTACGAC
CAGCGTGCATAGCTACTTGCCAACTCGGTTACTGAGTCCCTGTGTGTCAGTGGTGCATGGATGCTACTG
TTGAGCCGAGTGGGCGACGACCTGCTGGTCTACCTGCTGTGCGACTGTGCGCTCTACCTGCTGGTCCCC
CCAGCTGTGCCTACCAGGTGTGCGGGTACCCCTGTACCAAAATTTGTGCCACCACGGATACCTGGTCCCT
TGTGCCCGCTGGTTACAGGCCACTCGACCCGTGGCGGGAATTTACTAACCTTGGGTCCGCACACCAG
ATCAAAAACAGTGGTACCAGGAAGCACAAAACCCAGGCCCTGCCATCAGAGGTACGAAGAGGCTTC
TGAGTCTACCAGTACAAACGTGCCTTCAGCTAAGAAGGCCAGGTTTGAACCTGCCCTGAGAGTGGATAA
GGGACCCACAGGCAGGTGGTACCAACCCATCAGGCAAAACATGGGCGCCAAGTCTGTGCGTCCCC
AAGGTGCCTCCTGCAGCGAAAACCTTGTCTTTGAAAGGAAAGGCATCTGACCCGAGTCTCTCGGGTCCG
TGTGCTGTAACACAAGCCAGCTCCTCGTCCCTGCTGTGCATCACCACCCCAAGATGCTGAAAAGCTCAG
GCCATTACTGAGACCAGACATTTCTTTACTCCAGGGGAGGTGGCAAGAGGAGCTAAATCCCTCATTC
CTACTCAACAGCCTCCCGCTAGCTTGACCGGGCCAGGAGACTGGTGGAGATCATCTTTCTGGGCTCAA
GGCCTAGGACATCAGGACCATTCTGCAGGACCCGCCCTGCCCGTGCATACTGGCAGATGCGACCCCT
ATTCAGCAGCTGCTCATGAACCACGCAAAGTGCATATGTGATTCCTCCGGTGCAGTGCAGATTT
CGAACAGCAAACAGCGGGTGGCGGATGCCATGGACACCAGCCATCCACCTCAGAGTTGCTCCGGT
TACACAGCAGCCCTGGCAGGTATACGGCTTCTTCGGGCTGCCCTCCGCGAGTGGTGCCTGCCGGTCT
CTGGGGCACAGGCACAATGAGCGCCGCTTCTTAAGAAGCTGAAGAAGTTCATCTCGTTGGGGAAGTAC
GCCAAGCTATCCCTGCAGGAACTGATGTGGAGGGTGAAGTGGAGGACTGCCACTGGCTCCGCAGCAGCC
CAGAGAAGGACTGTCCCTGCCGAGAGCACCCTGAGGGAGAGGATCCTTGCCATGTTCTGTTCTG
GCTAATGGACACATATGTGGTACAGCTGCTGAGGTCATTCTTCTACATCACAGAGACCACGTTCCAGAAG



AACCGCCTTTTCTTCTACCGTAAGAGTGTGTGGAGCAAGCTGCAGAGCATTGGAATCAGGCAACAGCTTG
 AGAGAGTTCAGCTACGGAACTGTCACAAGAGGAGGTCAAGCATCACCAGGACACTTGGCTGGCCATGCC
 TATCTGCAGATTGCGCTTCATCCCCAAGCTCAATGGTCTCCGGCCATTGTGAACATGAGTTATGGCATG
 GACACCAGAGCTTTTGGCAAAAAGAAGCAGACCCAGTGTTCCTCAGAGTCTCAAGACTTTGTTACAGCG
 TGCTCAACTACGAGCGGACCAACATCCTAACCTTATGGGTGCTTCAGTACTGGGTACGAGTGACAGCTA
 CAGGATCTGGCGGACCTTCGTGCTGCGTGTGCGTGTCTGGACCAGACACCCAGGATGTACTTTGTTAAG
 GCAGATGTGACAGGGCCATGATGCCATCCCCAGGACAAGCTCGTGGAAATTGTCCCAATATAATCA
 GCGCTCAGAGAGCATGTACTGTATCCGCCAGTATGCAGTGGTTCAGAAAGATAGCCAAGGCCAAGTCCA
 CAAGTCCCTCAGGAGACAGGTCTCCACCCTCTCTGACCTCCAGCCATACATGGGCCAGTTACCAAGCAT
 CTGCAGGACTCAGATGCCAGTGCCTGAGGAACCTGTTGTCATCGAGCAGAGCATCTCCATGAATGAGA
 CTGGCAGTAGCCTGCTCCACTTCTCTGCGCTTTGTCCGTACAGTGTGCGTGAAGATCGATGGCAGGTT
 CTATGTGCAATGCCAGGGCATCCCCAGGGCTCCAGCCTGTCCACCCTGCTCTGCAGTCTGTGTTTCGGA
 GACATGGAGAACAAGCTGTTGCCGAGGTGCAGCAGGACGGCTTGCTTTTACGTTTTGTCGATGACTTTC
 TGTTGGTGACACCTCACCTGGCCATGCAAAGCCTTTCTCAGCACCTGGTCCATGGCGTGCCCGAGTA
 TGCTGCATGATAAACTTGCAAGACAGTGGTGAACCTCCCTGTGGAGACCGGCCCTGGGAGGTGCA
 GCCCGCACACAGCTGCCTGCTCACTGCCTGTTCCCTGGTGTGGCTTACTGCTGGACACTCGGACTTTGG
 AAGTATCTGTGACTACTCAGGTTACGGACGGACCTCAATTAAGATGAGCCTCACCTCCAGGGTGTCTC
 CAGGGCCGGGAAGACCATGCGGTACAAGCTCTTGTGAGTCTTGGCGTTGAAGTGTGATGGTCTGTTTCTA
 GACTTGCAGGTGAACAGCCTGCAGACAGTCTGCATCAATATATAAAGATCTTCTGCTTCAGGCCATACA
 GGTTCCATGCATGTGTGATTGCGCTTCCCTTTGGCCAGCATGTTAGGAAGAACCATGCATTCTTTCTGGG
 CATCATCTCAACCTAGCATCCTGCTGTACGCCATCCTGAAGGTCAAGAATCCAGGAGTGTCACTAAGG
 GCCAAGGTGCCCTGGCTCCTTTCCGCCGAGGCCACACGTTGGCTCTGCTACCAAGCCTCCTGCTCA
 AGCTGGCTGCTCATTCTGTACACTACAAGTGTCTCCTGGGACCTTTAGGACAGCCAAAAACAGCTGTG
 CCGGAAGCTCCCAGAGGCAACAATGACCCTCCTTAAGACTGCAGTGCAGCCAGCCCTAAGCACAGATTTT
 CAGACCATTTTGGACTAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:

SgfI-MluI

ACCN:

NM_053423

Insert Size:

3378 bp

OTI Disclaimer:

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

Components:

The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq:

[NM_053423.1](#), [NP_445875.1](#)

RefSeq Size: 3378 bp

RefSeq ORF: 3378 bp

Locus ID: 301965

UniProt ID: [Q673L6](#)

Cytogenetics: 1p11

Gene Summary: 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 (By similarity).[UniProtKB/Swiss-Prot Function]