

Product datasheet for RC225551

Tuftelin 1 (TUFT1) (NM_001126337) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tuftelin 1 (TUFT1) (NM_001126337) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Tuftelin 1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC225551 representing NM_001126337 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGATCGCC

ATGAACGGGACGCGGAACCTGGTGTACCCTGGTGGACGTGCACCCAGAGGACCAGGCGGGCGGGCAGGA
AGACCTATGCCATGGTGTCCAGCCACTCAGCTGGTCATTCTGGCTTCAGAAGCTGGTGGAGTCCCATGA
TGGACATGAGGAGATCATTAAAGGTGTACTTGAAGGGGAGGTCTGGAGACAAGATGATTCACGAGAAGAAT
ATTAACCAGCTGAAGAGTGAGGTCCAGTACATCCAGGAGGCCAGGAACCTGCCTACAGAAGCTCCGGGAGG
ATATAAGTAGCAAGCTTGACAGGAACCTAGGAGATTCTCCATCGACAGGAGATACAGGTGGTGTCTAGA
AAAGCCAAATGGCTTTAGTCAGAGTCCCACAGCCCTGTACAGCAGCCACCTGAGGTGGACACCTGTATA
AATGAGGATGTTGAGAGCTTGAGGAAGACGGTGCAGGACTTGCTGGCCAAGCTTCAGGAGCCAAGCGGC
AACACCAGTCAGACTGTGTGGCTTTTGAGGTCACTCAGCCGGTACCAGAGGGAAGCAGAACAAAGTAA
TGTGGCCCTTCAGAGAGAGGAGGACAGAGTGGAGCAGAAAGAGGCAGAAAGTCGGAGAGCTGCAGAGGCGC
TTGCTAGGGATGGAGACGGAGCATCAGGCCTTACTGGCGAAAAGTGAGGGAAGGGGAGGTGGCCCTAGAGG
AACTTCGGAGCAACAATGCTGACTGCCAAGCAGAACGAGAAAAGGCTGCTACCCTGGAAGGAAGTGGC
CGGTTGCGGGAGAAGATCCACCACTTGGATGACATGCTCAAGAGCCAGCAGCGGAAAAGTCCGGCAAATG
ATAGAGCAGCTCCAGAATTCAAAAGCTGTGATCCAGTCAAAGGACGCCACCATCCAGGAGCTCAAGGAGA
AAATCGCCTATCTGGAGGCAGAGAAATTTAGAGATGCATGACCGGATGGAACACCTGATAGAAAAACAAAT
CAGTCATGGCAACTTCAGCACCCAGGCCCGGGCAAGACAGAGAACC CGGGCAGTATTAGGATATCCAAG
CCGCTAGCCGAAGCCCATGCCTGTCATCCGAGTGGTGGAAACC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC225551 representing NM_001126337
Red=Cloning site Green=Tags(s)

MNGTRNWTCLVDVHPEDQAAAGRKYAMVSSHSAGHSLASELVESHGHEEIIKVYLKGRSGDKMIHEKN
 INQLKSEVQYIQEARNCLQKLREDISSKLDNRNLGDSLHRQEIQVLEKPNQGSQSPTALYSSPPEVDTCI
 NEDVESLRKTVQDLLAKLQEAQRQHQSDCVAFEVTL SRYQREAEQSNVALQREEDRVEQKEAEVGEQRR
 LLGMETEHQALLAKVREGEVALEELRSNNADCQAEREKAATLEKEVAGLREKIHHLDDMLK SQQRKVRQM
 IEQLQNSKAVIQSKDATIQELKEKIAYLEAENLEMHDRMEHLIEKQISHGNFSTQARAKTENPGSIRISK
 PPSPKMPVIRVET

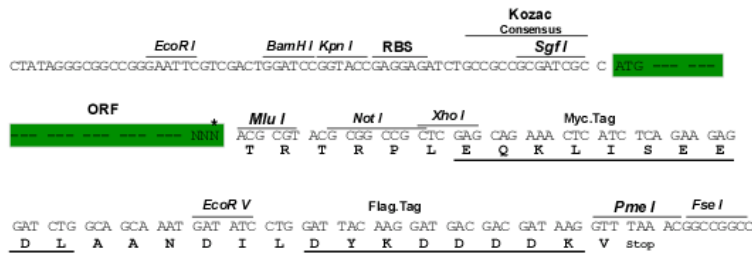
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja1525_c02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001126337

ORF Size: 1095 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_001126337.2](#)

RefSeq ORF: 1098 bp

Locus ID: 7286

UniProt ID: [Q9NNX1](#)

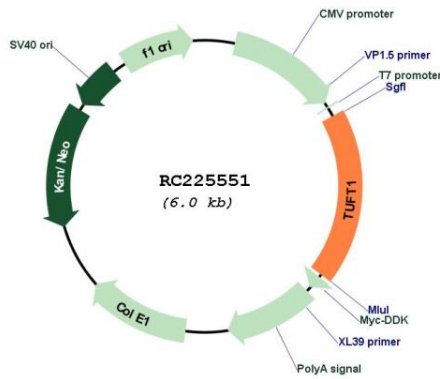
Cytogenetics: 1q21.3

Protein Families: Secreted Protein

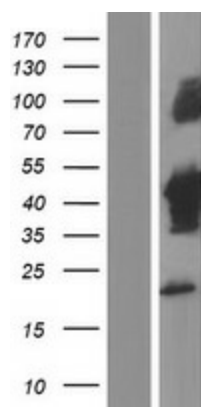
MW: 41.4 kDa

Gene Summary: Tuftelin is an acidic protein that is thought to play a role in dental enamel mineralization and is implicated in caries susceptibility. It is also thought to be involved with adaptation to hypoxia, mesenchymal stem cell function, and neurotrophin nerve growth factor mediated neuronal differentiation. [provided by RefSeq, Aug 2014]

Product images:



Circular map for RC225551



Western blot validation of overexpression lysate (Cat# [LY426678]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC225551 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).