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Product datasheet for SC311080

TRF4 2 (PAPD5) (NM_001040285) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TRF4 2 (PAPD5) (NM_001040285) Human Untagged Clone
Tag:	Tag Free
Symbol:	TRF4 2
Synonyms:	PAPD5; TRF4-2; TUT3
Vector:	pCMV6 series

Fully Sequenced ORF:

>NCBI ORF sequence for NM_001040285, the custom clone sequence may differ by one or more nucleotides

ATGCGGCCTCGTCCACGCTCAGCACCGGGGAAGCCGAGGCGGAGAAGCCGCGCGCGCCTC
AGAAGCTCCCGGACGCCCAGCGGCGGCGCGAGCGGCGGCGGCGGCAGCAGCAGCAGCAGC
AGCACGGCCACCGGCGGGAGCGGCAGCAGCACCGGCAGCCCCGGCGGCGCGGCCTCGGCC
CCGGCCCCGGCCCCGGCCGGCATGTATCGCTCCGGGGAGCGCCTGCTGGGCAGCCACGCG
CTGCCCGCGGAGCAGCGGGACTTCCTGCCCCTAGAGACGACCAACAACAACAACAACCAC
CACCAGCCCGGGGCCTGGGCCCGCCGGGCGGGCTCCTCGGCGTCCTCGCCTCCCTCGGCG
TCCTCGTCCCCGCACCCTTCGGCCGCCGTCCCCGCCGCCGATCCAGCCGATTCGGCCTCG
GGCAGCAGCAACAAGAGGAAGCGCGACAACAAGGCCAGCACGTATGGACTCAACTACAGC
CTGCTGCAGCCCAGCGGAGGGCGGGCCGCGGGGGGCGGCCGAGCAGACGGCGGCGGGGTC
GTGTACAGCGGGACCCCGTGGAAACGGAGGAACTACAACCAGGGAGTCGTGGGTCTGCAT
GAAGAAATCAGTGATTTTTATGAATACATGTCTCCAAGACCTGAGGAGGAGAAGATGCGG
ATGGAGGTGGTGAACAGGATCGAGAGTGTAATTAAGGAGCTCTGGCCCAGCGCTGACGTC
CAGATATTTGGAAGTTTTAAAACTGGACTTTATTTACCTACTAGTGACATCGACCTAGTG
GTGTTTGGGAAGTGGGAGAACCTACCCCTCTGGACTCTGGAAGAAGCTCTTCGGAAACAC
AAAGTCGCAGATGAGGATTCGGTGAAAGTTTTAGACAAAGCAACTGTACCTATTATTAAA
TTAACAGATTCTTTTACTGAAGTGAAAGTTGATATCAGCTTTAATGTACAGAATGGCGTG
AGAGCAGCTGACCTCATCAAAGATTTTACCAAGAAATATCCTGTATTGCCATACTTGGTT
TTAGTATTGAAACAATTCCTATTGCAGAGGGACCTTAATGAAGTATTTACAGGTGGAATT
GGTTCTTATAGTCTCTTTTTAATGGCAGTCAGTTTCCTTCAGTTACATCCCAGGGAAGAT
GCTTGCATCCCCAATACAAACTATGGTGTTCTCTTAATAGAATTTTTTGAATTATATGGA
CGACACTTCAATTATTTAAAGACTGGCATCCGGATAAAGGATGGTGGTTCATATGTGGCC
AAAGATGAAGTACAGAAAAATATGCTAGATGGCTACAGGCCATCAATGCTTTATATCGAA
GATCCTTTACAACCAGGTAACGATGTTGGAAGGAGTTCATATGGGGCCATGCAAGTGAAG
CAGGCCTTTGATTATGCCTACGTTGTTTTGAGTCATGCTGTATCACCAATAGCAAAGTAC
TATCCCAACAATGAAACAGAAAGCATACTAGGTAGAATAATTAGAGTAACAGATGAAGTT
GCCACATATAGAGATTGGATATCAAAGCAGTGGGGCTTGAAGAATAGACCTGAGCCTTCA
TGCAATGGTCCAGTGTCGTCCTCTTCTGCCACACAGTCCAGCTCTAGTGATGTAGATTCC
GATGCAACACCATGCAAAACCCCGAAACAGCTGCTTTGCCGTCCGTCCACTGGGAACCGA
GTAGGGTCGCAAGATGTATCCTTGGAGTCCTCTCAGGCAGTTGGGAAAATGCAAAGCACC
CAAACCACTAACACATCCAACAGCACCAACAAATCTCAGCATGGATCAGCAAGGCTCTTT
CGTTCTTCCAGCAAAGGCTTCCAAGGTACAACTCAAACAAGCCATGGTTCCTTGATGACA
AACAAACAACATCAAGGCAAATCCAATAATCAGTATTACCATGGCAAAAAGAGGAAACAC
AAGAGGGACGCGCCCCTCTCAGACCTCTGTAGATAG

Restriction Sites: Please inquire

ACCN: NM_001040285

OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery. 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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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_001040285.1, NP_001035375.1
RefSeq Size:	7448 bp
RefSeq ORF:	1329 bp
Locus ID:	64282
UniProt ID:	Q8NDF8
Cytogenetics:	16q12.1

Gene Summary: Terminal nucleotidyltransferase that catalyzes preferentially the transfert of ATP and GTP on RNA 3' poly(A) tail creating a heterogeneous 3' poly(A) tail leading to mRNAs stabilization by protecting mRNAs from active deadenylation (PubMed:21788334, PubMed:30026317). Also functions as a catalytic subunit of a TRAMP-like complex which has a poly(A) RNA polymerase activity and is involved in a post-transcriptional quality control mechanism. Polyadenylation with short oligo(A) tails is required for the degradative activity of the exosome on several of its nuclear RNA substrates. Doesn't need a cofactor for polyadenylation activity (in vitro) (PubMed:21788334, PubMed:21855801). Required for cytoplasmic polyadenylation of mRNAs involved in carbohydrate metabolism, including the glucose transporter SLC2A1/GLUT1 (PubMed:28383716). Plays a role in replication-dependent histone mRNA degradation, probably through terminal uridylation of mature histone mRNAs. May play a role in sister chromatid cohesion (PubMed:18172165). Mediates 3' adenylation of the microRNA MIR21 followed by its 3'-to-5' trimming by the exoribonuclease PARN leading to degradation (PubMed:25049417). Mediates 3' adenylation of H/ACA box snoRNAs (small nucleolar RNAs) followed by its 3'-to-5' trimming by the exoribonuclease PARN which enhances snoRNA stability and maturation (PubMed:22442037).[UniProtKB/Swiss-Prot Function]
Transcript Variant: This variant (2) uses an alternate in-frame splice site in the central coding region, compared to variant 1. The resulting isoform (b) lacks an internal segment, compared to isoform a. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.