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Product datasheet for SC325798

RPUSD4 (NM_001144827) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RPUSD4 (NM_001144827) Human Untagged Clone
Tag:	Tag Free
Symbol:	RPUSD4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC325798 representing NM_001144827. Blue=Insert sequence Red=Cloning site Green=Tag(s) GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC ATGGCGGCGCCCAGGTGGAGCGCGTCGGGCCCCTGGATCCGGGGAAACGGCCAAGGTTGCGGGAGTCTC TTCACTCTCGTCTCAAAGCCATTTTGTGCCGCTGCCGCTGCCTCTACGGCCATAAATGCCCAGAGATTA GCGGAGAAGCTCCGAGCCCAGAAACGGGAACAAGACACAAAGAAGGAGCCGGTGTCCACAAACGCTGTT CAGCGGAGAGTGCAAGAAATAGTGCGGTTCACACGGCAGCTGCAGCGAGTCCACCCCAACGTGCTTGCT AAGGCACTGACCCGAGGAATTCTCCACCAGGACAAGAACCTTGTGGTCATCAATAAGCCCTACGGTCTC CCTGTGCATGGTGGCCCTGGGGTCCAGCTCTGCATCACTGATGTACTACCTATCCTGGCAAAGATGCTT CATGGCCACAAGGCAGAGCCCTTGCATCTGTGCCACCGGCTGGACAAGGAAACCACAGGTGTAATGGTG TTGGCTTGGGACAAGGACATGGCACATCAAGTCCAAGAGTTGTTTAGAACCCGTCAGGTGGTGAAGAAG TACTGGGCCATCACTGTGCATGTCCCCATGCCCTCAGCAGGAGTCGTGGACATCCCCATTGTGGAGAAG GAGGCGCAAGTTGCTGTAACTCAGTACCAGGTGCTCAGCAGCACTCTCTCCTCCGCCCTCGTGGAGCTC CAGCCCATCACTGGAATAAAACATCAGCTTCGAGTTCACTTGTCTTTTGGATTGGATTGTCCAATCCTT GGTGATCACAAGTACTCAGACTGGAATAGGTTGGCCCCCCAGAAGCTGTCTGTGGGCACCCTGAAGAAG CTGGGGCTAGAACAGTCGAAGGCCCGCTACATCCCCCTTCACCTGCACGCCCGGCAGCTGATCCTGCCT GCCCTGGGGTCCGGGAAGGAGGAACTCAACTTGGTCTGCAAACTTCCTCGCTTCTTTGTGCATTCCCTG CACCGCCTGCGTTTAGAGATGCCAAATGAGGATCAAAATGAGAACAATGAAGCCAAGTGTCTGGGAGCA CAGTGA ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
Restriction Sites:	SgfI-MluI
ACCN:	NM_001144827
Insert Size:	1041 bp

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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).
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_001144827.1
RefSeq Size:	2434 bp
RefSeq ORF:	1041 bp
Locus ID:	84881
UniProt ID:	Q96CM3
Cytogenetics:	11q24.2
MW:	38.6 kDa
Gene Summary:	Catalyzes uridine to pseudouridine isomerization (pseudouridylation) of different mitochondrial RNA substrates. Acts on position 1397 in 16S mitochondrial ribosomal RNA (16S mt-rRNA). This modification is required for the assembly of 16S mt-rRNA into a functional mitochondrial ribosome (PubMed:27974379). Acts on position 39 in mitochondrial tRNA(Phe) (PubMed:28082677). As a component of a functional protein-RNA module, consisting of RCC1L, NGRN, RPUSD3, RPUSD4, TRUB2, FASTKD2 and 16S mt-rRNA, controls 16S mt-rRNA abundance and is required for intra-mitochondrial translation (PubMed:27667664). [UniProtKB/Swiss-Prot Function] Transcript Variant: This variant (2) uses two alternate in-frame splice sites in the coding region, compared to variant 1. This results in a shorter protein (isoform b) compared to isoform a.