

Product datasheet for **RG214313**

CTU2 (NM_001012762) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	CTU2
Synonyms:	C16orf84; MFRG; NCS2; UPF0432
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



ORF Nucleotide Sequence: >RG214313 representing NM_001012762
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGTGTCAGGTGGCGAGGACTACGGGAGCCGGCGCCTGAGGAGCCGCCCCGGCGCCGGCCAGCC
 GTGAGCAGAAGTGTGTGAAGTGAAGGAAGCGCAGCCGTTGTGGTGATACGAGCCGAGATGCCTTCTG
 CAGGGACTGTTTCAAGGCCCTTACGTCCACAAGTTCAGAGCCATGCTGGGCAAGAACCGGCTCATCTTT
 CCAGGCGAGAAGGTGCTCTTGGCGTGGTCTGGGGGGCCTTCGTCCAGCTCCATGGTCTGGCAGGTTCTTG
 AGGGCCTGAGCCAAGATTCTGCCAAAAGACTGCGCTTTGTGGCAGGAGTCATCTTTGTTGACGAGGGAGC
 AGCCTGTGGCCAGAGCCTAGAGGAGAGATCAAAGACCCTGGCCGAAGTGAAGCCATTCTGCAAGCAACT
 GGGTTCCTCATGGCATGTGGTGGCCTTAGAGGAGGTGTTGAGCCTGCCACCGTCGGTGTCTTGGTGTCTG
 CCCAGGAGCTGGTGGGATCCGAGGGGGCCTACAAGGCGGCCGTGGACAGCTTCTCCAGCAGCAGCATGT
 GCTGGGGGCGGGGGTGGTCTGGCCCGACTCAAGGGGAGGAACAGCCACCCAGCCCCGCTGGACCCC
 CAGAACCTGGCAAGACCGCCTGCCCTGCCAGACTGAGGCTCTTCCCAACTGTTCTGCTCAGTGAGGA
 CACTGACTGCCAAGGAGGAGCTTCTGCAGACCCTGCGGACCCACCTGATCCTCCACATGGCCCGAGCCCA
 CGGCTACTCCAAGGTGATGACTGGGGACAGCTGCACACGTTGGCTATCAAGCTCATGACCAACCTGGCG
 CTGGGTCGAGGGGCTTCTGGCCTGGGATACGGGCTTCTCGGATGAGCGGCACGGGACGTGGTGGTGG
 TCGGGCCCATGCGGGACCACACCCTGAAGGAGGTGCTTTCTACAACCGCTGTTCTCCGTTCTTCTGT
 CTTACACCAAGCCGTCGACACCAAGGCCCTGAAAAGGCCAGCATCCACCGGCTGATGGAGGCCCTTCATC
 CTCAGGCTGCAGACCCAGTTCCTCCACTGTCAGCACTGTGTACAGGACAAGTGAAGAGTGGTGAAGG
 GCCCCCGGATGGCCCTGCTGCTGGCGACTCCGGCCCCGCTGCCCTCTGTCATGTGTGCCCTGGACGT
 CGACGCGCTGACAGTGCCACGGCTTTTGGGGCTCAGACCTCCTCGCTCTCTCCAGATGCAGTACCC
 ATCCCCCTGACTGAGACCCGGACACCCCGGGGCCCTGCTGTTCTCCAGGGGTGGGCTGGGCCACGCGT
 GTGGCCAGGGGGCTGCAGGAGGGAGGACCCCAAGCCTGCATTGAGGAGCAGCTGTGCTACAGCTGCCG
 CGTGAACATGAAGGACTTGGCCTGGGGCTTGCAGGAGATCCGGGACTGTCTGAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

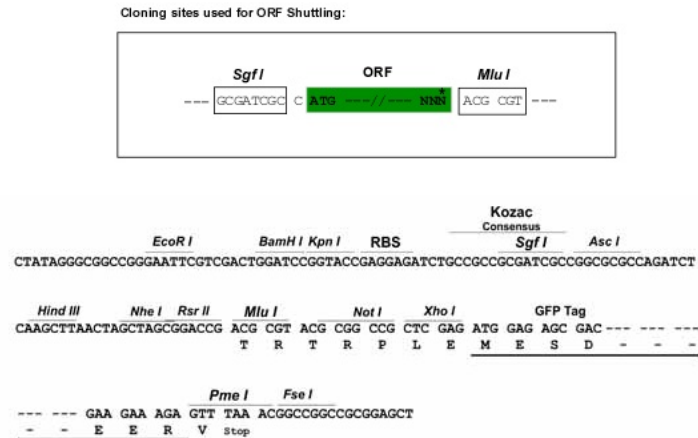
Protein Sequence: >RG214313 representing NM_001012762
 Red=Cloning site Green=Tags(s)

MCQVGEDYGEPAPEPPAPRPSREQKCVKCKEAQPVVIRAGDAFCRDCFKAFYVHKFRAMLGKNRLIF
 PGEKVLLAWSGGPSSSMVWQVLEGLSQDSAKRLRFVAGVIFVDEGAACQSLEERSKTLAEVKPILQAT
 GFPWHVVALEEVFSLPPSVLWCSAQELVGSEGAYKAAVDSFLQQQHVLAGGGPGPTQGEEQPPQPLDP
 QNLARPPAPAQTEALSQFLCSVRTLTAKELLQTLRTHLILHMARAHGYSKVMTGDSCTRLAIKLMTNLA
 LGRGAFLAWDTGFSDERHGDVVVVRPMRDHTLKEVAFYNRLFSVPSVFTPAVDTKAPEKASIHRLMEAFI
 LRLQTQFPSTVSTVYRTSEKLVKGPRDGPAAAGDSGPRCLLCMCALDVAADSATAFGAQTSSRLSQMQSP
 IPLTETRTPPGCCSPGVGWAQRGCGACRRREDPQACIEEQLCYSCRNVNMDLGLGLAGDPGLSD

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001012762

ORF Size: 1455 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001012762.3](#)

RefSeq Size: 1681 bp

RefSeq ORF: 1458 bp

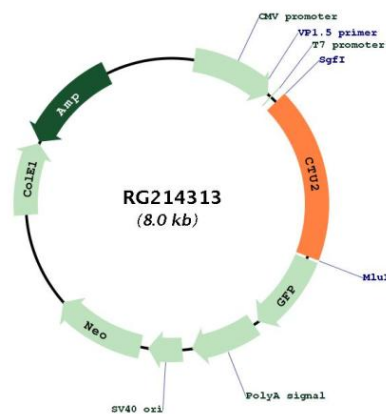
Locus ID: 348180

UniProt ID: [Q2VPK5](#)

Cytogenetics: 16q24.3

Gene Summary: This gene encodes a protein which is involved in the post-transcriptional modification of transfer RNAs (tRNAs). The encoded protein plays a role in thiolation of uridine residue present at the wobble position in a subset of tRNAs, resulting in enhanced codon reading accuracy. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jan 2016]

Product images:



Circular map for RG214313