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Product datasheet for MR206663

Ctu1 (NM_145582) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	Ctu1
Synonyms:	Atpbd3; BC005752
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR206663 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCCCGCCCCGACGTGCTTCTCCTGTCACAAGACCCGTGCTGCCCTCCGTCGCCCACGTTCTGGGCAGG
CGCTGTGCGGCTCCTGCTTCTGTGCTGCCTTTGAGGCTGAGGTGCTACATACAGTGCTTGCCGGGCACCT
GCTGCCGCCGGGCGCTGTAGTGGCCGTGGGTGCCTCTGGTGGCAAGGACTCCACAGTGCTGGCACACGTG
CTGCGTGAGCTTGCGCCCCGCCTGGGCATCACCCTGCACCTGGTGGCGGTGGATGAGGGCATCGGCGGCT
ACCGGGACGCCGCGCTGGAGGCAGTGCGCAGTCAGGCGGCGCGCTGGGAGCTGCCGCTCACCATCGTGGC
CTACGAAGATCTCTTCGGGGGCTGGACGATGGACGCCGTGGCCCGCAGCACCGCAGGCTCCGGCCGCAGT
CGCTCCTGCTGCACCTTCTGCGGGGTGCTGCGGAGGCGCGCGCTGGAGGAGGGTGCGCGCCTTGTGGGAG
CTACACATATTGTGACAGGCCACAACGCTGACGACATGGCTGAGACGGTGCTCATGAACTTCCTGCGTGG
TGATGCTGGGAGGCTGGCGAGGGGTGGGGTGCTGGGCTCCACGGGCGAGGGGTGCGCACTTCCCAGGTGC
CGGCCTCTGCAGTTTGCCTCGCAGAAGGAGGTGGTGCTGTATGCGCACTTCCGCCATCTCCGCTACTTTT
CCGAGGAGTGCGTGTATGCCCCTGAGGCCTTCCGTGGTCATGCCCGGGACCTGCTTAAGCTCCTGGAGGC
GGCCAGACCATCAGCCGTGCTGGACCTCGTGCACTCGGCAGAGCGCCTAGCTCTGGCTCCGGCAGCAAAG
CCCCCTCCTCCAGGCACCTGCTCCCGCTGCGGAGCCCTGGCCAGCCACAAGCTCTGCCAGGCCTGTGCCC
TCCTGGATGGCCTCAACCGAGGCCTGCCGCGCCTGGCCATCGGCAAGGGCCGCCGTGTGCTGCAAGTTGA
GCCTCCACAGCCTGGGAACCCAAGCCTAGTCACCAGTGACCCTGTGGCCCCAGCAGGACCCTGCACCTGC
AAGCAACCGAAAGATAAAGCCAACCCATGCGGCAATGGAGGGGACCGGGCAGGAGCCACCTGTGTATCGC
AGTGTGACCTGAGCCCCGGGAATGGAGAGGACCGGGCAGGAGCCACCTGTGTATCGCAGAGGGACCTGAG
CCTTGGGAATGGAGGGGACCGGGCAGGAGCCACCTGTGTATCGCAGTGTGACCTGAGCCCCGTGGCGGAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

View online »

Protein Sequence:

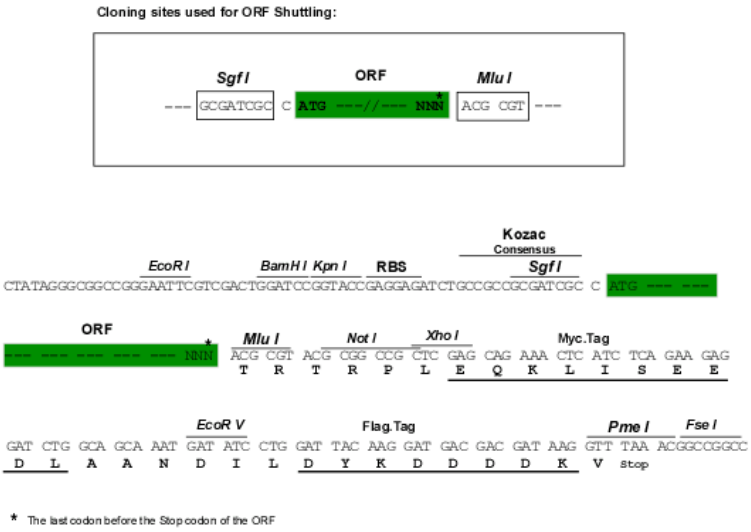
>MR206663 protein sequence
Red=Cloning site Green=Tags(s)

MPAPTCFSCHKTRAALRRPRSGQALCGSCFCAAFEAEVLHTVLAGHLLPPGAVVAVGASGGKDSTVLAHV
LRELAPRLGITLHLVAVDEGIGGYRDAALEAVRSQAARWELPLTIVAYEDLFGGWTMDAVARSTAGSGRS
RSCCTFCGVLRRRALEEGARLVGATHIVTGHNADDMAETVLMNFLRGDAGRLARGGVLGSTGEGCALPRC
RPLQFASQKEVVLYAHFRHLRYFSEECVYAPEAFRGHARDLLKLLEAARPSAVLDLVHSAERLALAPAAK
PPPPGTCSRCGALASHKLCQACALLDGLNRGLPRLAIGKGRRVLQVEPPQPGNPSLVTSDPVAPAGPCTC
KQPKDKANPCGNGGDRAGATCVSQCDLSPGNGEDRAGATCVSQRDLSLGNGGDRAGATCVSQCDLSPVAE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_145582

ORF Size: 1260 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_145582.1, NP_663557.1

RefSeq Size: 2476 bp

RefSeq ORF: 1263 bp

Locus ID: 233189

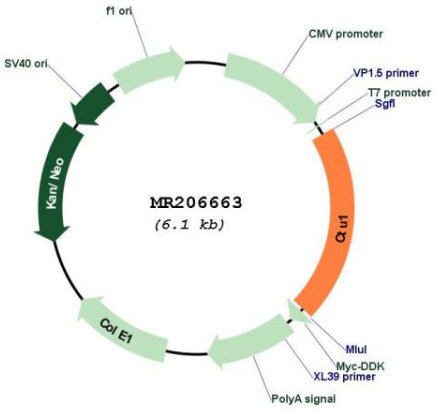
UniProt ID: Q99J10

Cytogenetics: 7 B3

MW: 43.8 kDa

Gene Summary: Plays a central role in 2-thiolation of mcm(5)S(2)U at tRNA wobble positions of tRNA(Lys), tRNA(Glu) and tRNA(Gln). Directly binds tRNAs and probably acts by catalyzing adenylation of tRNAs, an intermediate required for 2-thiolation. It is unclear whether it acts as a sulfurtransferase that transfers sulfur from thiocarboxylated URM1 onto the uridine of tRNAs at wobble position.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR206663