

Product datasheet for **RC233342**

MTRFR (NM_001194995) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	MTRFR
Synonyms:	C12orf65; COXPD7; SPG55
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence: >RC233342 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGCACCGTGGGTTTATTTTCATTTCTACACCACTGACCCGAATATGCCCGGCCCATGGGACTCC
GGCTTTGGGAGAAGCTGACGTTGTTATCCCAGGAATAGCTGTCACTCCGGTCCAGATGGCAGGCAAGAA
GGACTACCTGCACTGCTTTCTTGGATGAGAATGAAGAGCAGTTTGTGAAAGGACACGGTCCA
GGGGGCCAGGCAACCAACAAACCAGCAACTGCGTGGTGCTGAAGCACATCCCTCAGGCATCGTTGTAA
AGTGCCATCAGACAAGATCAGTTGATCAGAACAGAAAGCTAGCTCGGAAAATCCTACAAGAGAAAGTAGA
TGTTTTCTACAATGGTGAACAGTCCTGTTTCAAAAGAAAAACGAGAAGCGGCGAAGAAAAACAAGAA
AGGAAAAAAGAGCAAAGGAAACCCTGGAAAAAAGAAGCTACTTAAAGAACTGTGGAGTCAAGTAAAA
AGGTCCAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC233342 protein sequence
Red=Cloning site Green=Tags(s)

MSTVGLFHFPTPLTRICPAPWGLRLWEKLTLLSPGIATPVQMAGKKDYPALLSLDENELEEQFVKGHGP
GGQATNKTSNCVVLKHIPSGIVVKCHQTRSVDQNRKLARKILQEKVDVFYNGENSPVHKEKREAAKKKQE
RKKRAKETLEKKLLKELWESSKKVH

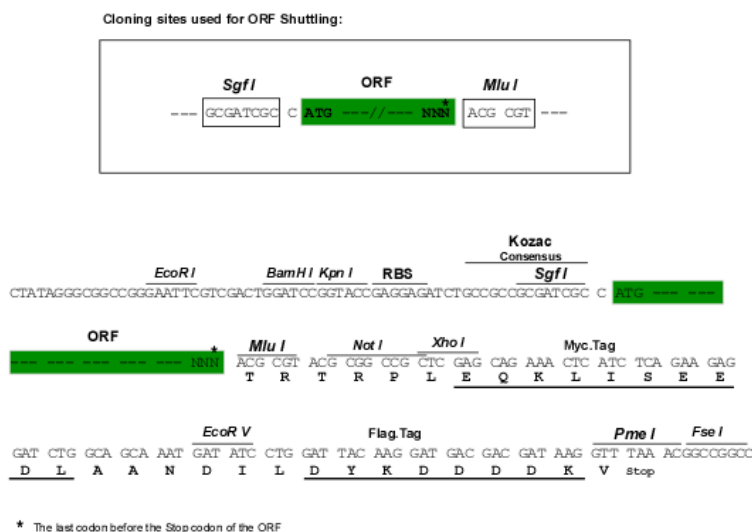
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6553_h09.zip



Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001194995

ORF Size: 498 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 0.22µm filter is required.

RefSeq: NM_001194995.1, NP_001181924.1

RefSeq Size: 1901 bp

RefSeq ORF: 501 bp

Locus ID: 91574

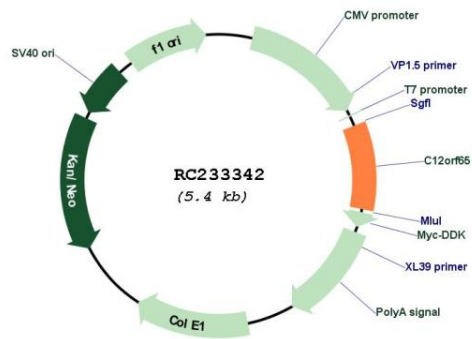
UniProt ID: [Q9H3J6](#)

Cytogenetics: 12q24.31

MW: 18.8 kDa

Gene Summary: This nuclear gene encodes a mitochondrial matrix protein that appears to contribute to peptide chain termination in the mitochondrial translation machinery. Two different 1 bp deletions (resulting in the same premature stop codon) result in decreased mitochondrial translation, decreased levels of oxidative phosphorylation complexes and encephalomyopathy. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2010]

Product images:



Circular map for RC233342