

Product datasheet for **RC220428**

MRPL30 (NM_145213) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MRPL30 (NM_145213) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MRPL30
Synonyms:	FLJ44438; MGC3314; MGC24095; mitochondrial ribosomal protein L30; MRP-L28; MRPL28; OTTHUMP00000161222; RPML28
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC220428 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGC**

ATGGCTGGGATTTTGGCTTAGTAGTTCAATGGCCCCAGGCAGACTACAGACCGTGACAAAAGGTGTGG
 AGTCTCTTATTTGTACAGATTGGATTCGTACAAATTCACCAGATCAAGAATTCAGAAAAAGTGTTC
 GGCCTCACCTGAAGATCATGAAAAATACGGTGGGGATCCACAGAACCTCATAAACTGCATATTGTTACC
 AGAATAAAAAGTACAAGAAGACGTCCATATTGGGAAAAAGATATAATAAAGATGCTTGGATTAGAAAAAG
 CACATACCCCTCAAGTTCACAAGAATATCCCTTCAGTGAATGCAAAATTGAAAGTAGTTAAGCATTTGAT
 AAGAATCAAGCCCTTGAAGTTGCCACAAGGACTCCAGCAGAGGAGAACATGTCTAACACGTGCCTCAA
 AGCACTGGGGAGTTAGTAGTGCAGTGGCATCTGAAACCTGTGGAGCAGAAAGCACATGAGTCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:	>RC220428 protein sequence Red=Cloning site Green=Tags(s)
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MAGILRLVVQWPPGRLQTVTKGVESLICDWRHKFTRSRIPKVFQASPEDHEKYGGDPQNPVKLHIVT
 RIKSTRRRPYWEKDIKMLGLEKAHTPQVHKNIPIVNAKLKVVKHLIRIKPLKLPQGLPAEENMSNTCLK
 STGELVVQWHLKPVEQKAHES

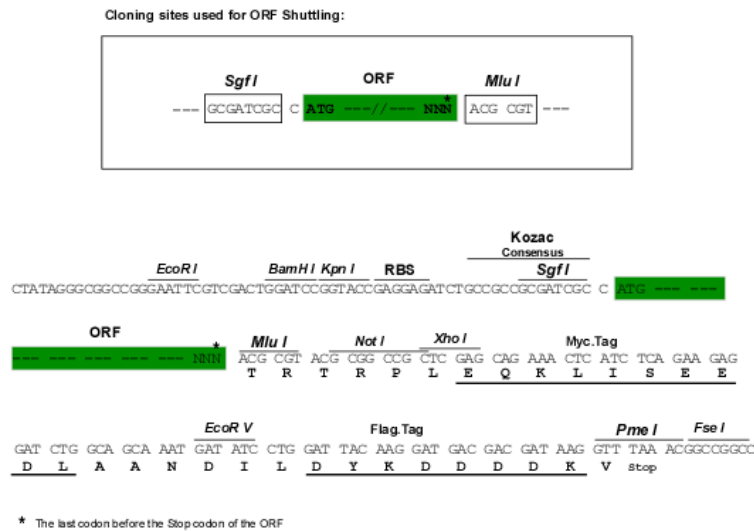
TRTRPLEQKLISEEDLAANDILDYKDDDDKV


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Chromatograms: https://cdn.origene.com/chromatograms/mk6439_e08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_145213

ORF Size: 483 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_145213.2](#)

RefSeq Size: 1172 bp

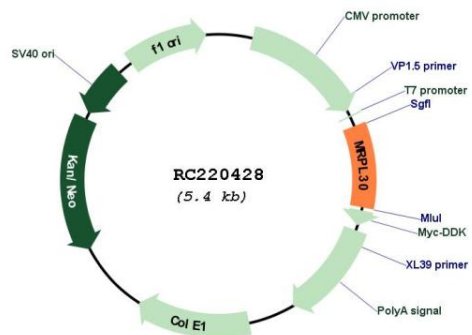
RefSeq ORF: 485 bp
Locus ID: 51263

Cytogenetics: 2q11.2

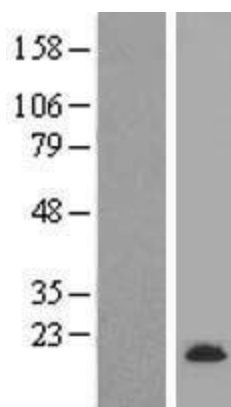
MW: 18.5 kDa

Gene Summary: Mammalian mitochondrial ribosomal proteins are encoded by nuclear genes and help in protein synthesis within the mitochondrion. Mitochondrial ribosomes (mitoribosomes) consist of a small 28S subunit and a large 39S subunit. They have an estimated 75% protein to rRNA composition compared to prokaryotic ribosomes, where this ratio is reversed. Another difference between mammalian mitoribosomes and prokaryotic ribosomes is that the latter contain a 5S rRNA. Among different species, the proteins comprising the mitoribosome differ greatly in sequence, and sometimes in biochemical properties, which prevents easy recognition by sequence homology. This gene encodes a 39S subunit protein. Alternative splicing results in multiple transcript variants. Pseudogenes corresponding to this gene are found on chromosomes 6p and 12p. Read-through transcription also exists between this gene and the neighboring upstream lipoyltransferase 1 (LIPT1) gene. [provided by RefSeq, Mar 2011]

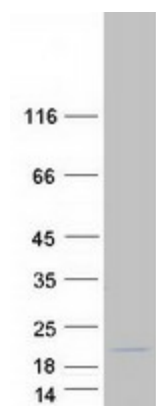
Product images:



Circular map for RC220428



Western blot validation of overexpression lysate (Cat# [LY407915]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220428 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MRPL30 protein (Cat# [TP320428]). The protein was produced from HEK293T cells transfected with MRPL30 cDNA clone (Cat# RC220428) using MegaTran 2.0 (Cat# [TT210002]).