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Product datasheet for RC226296

MOV10 (NM_001130079) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MOV10 (NM_001130079) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MOV10
Synonyms:	fSAP113; gb110
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC226296 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCCCAGTAAGTTCAGCTGCCGGCAGCTCCGGGAGGCGGGCCAGTGTTTCGAGAGTTTCCTGGTCGTTC
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GCTGCTGTGGCCCATGCTCTTTCCTGTGGCACCTCGGGACGTCCCGCTGCTGCCCTCAGATGTGAAACTC

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AAGCTGTACGACCGGAGTCTGGAGTCAAACCCAGAGCAGCTGCAGGCCATGAGGCACATTGTTACGGGCA
CCACCCGTCCAGCCCCCTACATCATCTTTGGGCCTCCAGGCACCGGCAAGACTGTCACGTTAGTGGAGGC
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC226296 protein sequence
Red=Cloning site Green=Tags(s)

MPSKFSCRQLREAGQCFESFLVVRGLDMETDRERLRTIYNRDFKISFGTPAPGFSSMLYGMKIANLAYVT
KTRVRFFRLDRWADVRFPEKRRMKLGSDISKHHKSLLAKIFYDRAEYLHGKHGVDVEVQGPHEARDGQLL
IRLDLNRKEVLTLRLRNGGTQSVTLTHLFPLCRTPQFAFYNEDQELPCPLGPGECYELHVHCKTSFVGYF
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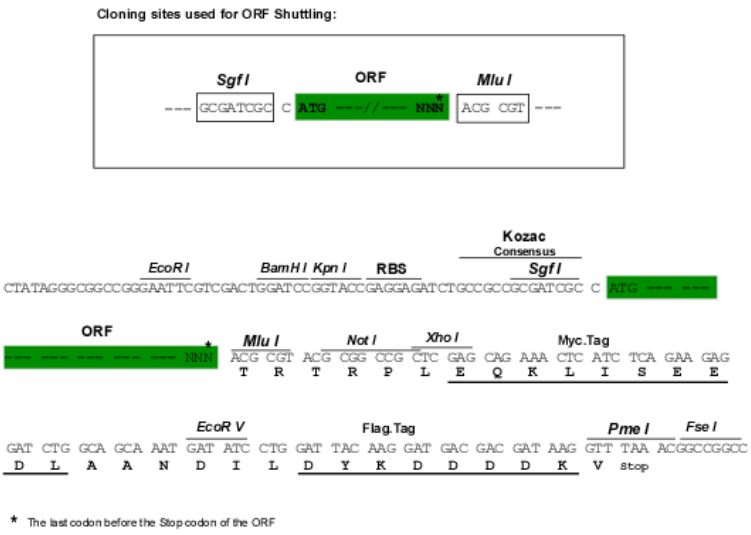
LPQEREGEGGLSLQVEPEWRNEL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6169_g06.zip

Restriction Sites: SgfI-MluI

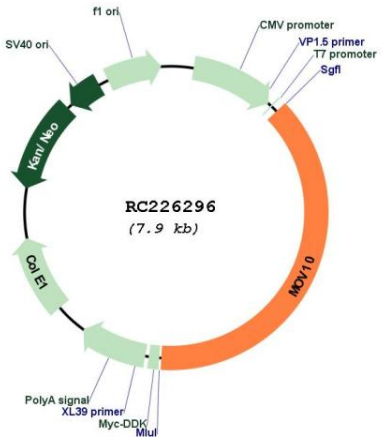
Cloning Scheme:



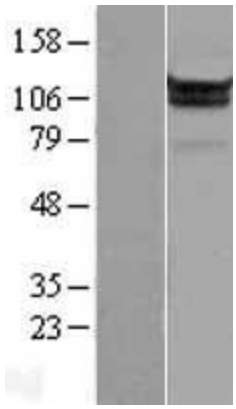
ACCN:	NM_001130079
ORF Size:	3009 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its 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.
RefSeq:	NM_001130079.2, NP_001123551.1
RefSeq Size:	3491 bp
RefSeq ORF:	3012 bp

Locus ID:	4343
UniProt ID:	Q9HCE1
Cytogenetics:	1p13.2
MW:	113.7 kDa
Gene Summary:	5' to 3' RNA helicase contributing to UPF1 mRNA target degradation by translocation along 3' UTRs (PubMed:24726324). Required for microRNA (miRNA)-mediated gene silencing by the RNA-induced silencing complex (RISC). Required for both miRNA-mediated translational repression and miRNA-mediated cleavage of complementary mRNAs by RISC (PubMed:16289642, PubMed:17507929, PubMed:22791714). In cooperation with FMR1, regulates miRNA-mediated translational repression by AGO2 (PubMed:25464849). Restricts retrotransposition of long interspersed element-1 (LINE-1) in cooperation with TUT4 and TUT7 counteracting the RNA chaperonne activity of L1RE1 (PubMed:30122351, PubMed:23093941). Facilitates LINE-1 uridylation by TUT4 and TUT7 (PubMed:30122351). Required for embryonic viability and for normal central nervous system development and function. Plays two critical roles in early brain development: suppresses retroelements in the nucleus by directly inhibiting cDNA synthesis, while regulates cytoskeletal mRNAs to influence neurite outgrowth in the cytosol (By similarity). May function as a messenger ribonucleoprotein (mRNP) clearance factor (PubMed:24726324).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC226296



Western blot validation of overexpression lysate (Cat# [LY427147]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC226296 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).