

## Product datasheet for RC200934

### MOV10 (NM\_020963) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	MOV10 (NM_020963) 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:	>RC200934 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCCAGTAAGTTCAGCTGCCGGCAGCTCCGGGAGGCGGCCAGTGTTTCGAGAGTTCCTGGTCGTTCC  
GGGACTGGACATGGAGACAGATCGCGAGCGGCTGCGGACCATTATAACCGCGACTTCAAGATCAGCTT  
TGGGACCCCGCCCTGGCTTCTCTCCATGCTGTATGGAATGAAGATTGCAAATCTGGCCTACGTCACC  
AAGACTCGGGTCAGGTTCTTCAGACTCGACCGTGGGCCGACGTGCGGTTCCAGAAAAGAGGAGAATGA  
AGCTGGGGTCAGATATCAGCAAACACCACAAGTCACTGCTAGCCAAGATCTTTTATGACAGGGCTGAGTA  
TCTTCATGGGAAACATGGTGTGGATGTGGAAGTCCAGGGGCCCATGAAGCCCGAGATGGGCAGCTCCTT  
ATCCGCTGGATTGAACCGCAAAGAGGTGCTGACCCCTGAGGCTTCGGAATGGCGGAACCCAGTCTGTTA  
CCCTCACTCACCTCTTCCCACTCTGCCGGACACCCAGTTTGCTTCTACAATGAAGACCAGGAGTTGCC  
CTGTCCACTGGGCCCCGGTGAATGCTATGAACTCCATGTCCATTGTAAGACCAGCTTTGTGGGCTACTTC  
CCAGCCACAGTGTCTGGGAGCTGCTGGGACCTGGGGAGTCGGGTTCAGAAGGAGCCGGCACATTCTACA  
TTGCCCGCTTCTGGCTGCCGTCGCCACAGCCCCCTGGCTGCACAGTGAAGCCATGACTCCCTTCAA  
AGCGGACCCGATACCCGAAACCCTGTGGTGACCAATCGGATAGAGGAAGGAGAGACCTGACCCGCT  
AAGGGCTATGACCTGGAGTTAAGTATGGCGCTGGGGACATAACCCACCTCCCGCCTCAGGCAGCTGC  
TCCCCATGCTTCTCAGGGAACAAGTATCTTCACTGCCCTAAGGAGATCGCAGAGATCAAGGCCAGCT  
GGAGACAGCCCTGAAGTGAGGAACTATGAGGTGAAGCTGCGGCTGCTGTCACCTGGAGGAACTGCAG  
ATGGAGCATGATATCCGGCACTATGACCTGGAGTCCGTTGCCATGACCTGGGACCCTGTGGACCAGAACC  
CCAGGCTGCTCACGCTGGAGTTCTGGAGTACTGAGAGCCGCCCTCAGTGTACGGGGCGACCCACT  
GTTTGCCTTTTGTCTCGGAGACACACCAGGAGGACCCCATCACATATAAGGGCTTTGTGCACAAGGTG  
GAATTGGACCGTCAAGCTGAGCTTTTCCATGAGCCTCTGAGCCGCTTTGTGGATGGGCTGACCTTCA  
AGGTGAACCTTACCTTCAACCGCCAGCCGCTGCGAGTCCAGCACCGTCCCTGGAGCTGACAGGGCGCTG  
GCTGCTGTGGCCATGCTTTTCTGTGGCACCTCGGGACGTCCCGCTGCTGCCCTCAGATGTGAAACT



[View online »](#)

AAGCTGTACGACCGGAGTCTGGAGTCAAACCCAGAGCAGCTGCAGGCCATGAGGCACATTGTTACGGGCA  
 CCACCCGTCCAGCCCCTACATCATCTTTGGGCCCTCCAGGCACCGGAAGACTGTACGTTAGTGGAGGC  
 AATTAAGCAGGTGGTGAAGCACTTGCCAAAGCCCACATCTTGGCCTGCGCTCCATCCAACCTCAGGGGCT  
 GACCTACTCTGTCAAAGGCTCCGGGTCCACCTTCTAGCTCCATCTACCGCTCCTGGCCCCAGCAGGG  
 ACATCCGCATGGTACCTGAGGACATCAAGCCCTGCTGCAACTGGGACGCAAGAAGGGGGAGTATGTATT  
 TCCCGCCAAAGAAGCTGCAGGAATACCGGTCTTAATTACCACCCTCATCACTGCCGGCAGGTTGGTC  
 TCGGCCACAGTTCCCATTTGATCACTTACACACATCTTTCATCGATGAGGCTGGCCACTGCATGGAGCCTG  
 AGAGTCTGGTAGCTATAGCAGGGCTGATGGAAGTAAAGGAAACAGGTGATCCAGGAGGGCAGCTGGTGCT  
 GGCAGGAGACCCTCGGCAGCTGGGGCTGTGCTGCGTTCCCACTGACCCAGAAGCATGGACTGGGATAC  
 TCACTGCTGGAGCGGCTGCTCACCTACAACCTCCCTGTACAAGAAGGGCCCTGATGGCTATGACCCCCAGT  
 TCATAACCAAGCTGCTCCGCAACTACAGGTCTCATCCCACCATCCTGGACATTCTAACCAGCTCTATTA  
 TGAAGGGGAGCTGCAGGCCTGTGCTGATGTCGTGGATCGAGAACGCTTCTGCCGTGGCGGGCCTACCT  
 CGACAGGGCTTTCCCATCATCTTACGGCGTAATGGGCAAGATGAGCGTGAAGGCAACAGCCCATCCT  
 TCTTCAACCTGAAGAGGCTGCCACAGTGACTTCTACCTGAAGCTGCTCCTGGCCCCCTCTCAAAGAA  
 GGGCAAAGCTCGCCTGAGCCCTCGAAGTGTGGCGTCATCTCCCGTACCGGAAACAGGTGGAGAAAATC  
 CGTTACTGCATACCAAACCTTGACAGGGAGCTTGGAGGACTGGATGACATCAAGGACTTGAAGGTGGGTT  
 CAGTAGAAGAATTCCAAGGCCAAGAACGAAGCGTCATCCTCATCTCCACCGTGCGAAGCAGCCAGAGCTT  
 TGTGCAGCTGGATCTGGACTTTAATCTGGGTTTCTTAAGAACCCTAAGAGGTTCAATGTAGCTGTGACC  
 CGGGCCAAAGCCCTGCTCATCATCGTGGGGAACCCCTTCTCCTGGGCCATGACCCTGACTGGAAAGTAT  
 TCCTGGAGTTCTGTAAGAAAACGGAGGGTATACCGGGTGTCCCTTCCCTGCCAACTGGACCTGCAACA  
 GGGACAGAATTTACTGCAAGGTCTGAGCAAGCTCAGCCCTCTACCTCAGGGCCCCACAGCCATGACTAC  
 TCCCCCAGGAGCGGGAGGGTGAAGGGGCTGTCTCTGCAAGTGGAGCCAGAGTGGAGGAATGAGCTC

ACGCGTACGCGCGCCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGAT AAGGTTTAA

**Protein Sequence:**

>RC200934 protein sequence  
 Red=Cloning site Green=Tags(s)

MPSKFSRQLREAGQCFESFLVVRGLDMETDRERLRTIYNRDFKISFGTPAPGFSMLYGMKIANLAYVT  
 KTRVRFRLDRWADVRFPEKRRMKLGSDISKHHKSLAKIFYDRAEYLHGKHGVDVEVQGPHEARDGQLL  
 IRLDLNRKEVLTLLRNGGTQSRTLHLFPLCRTPQFAFYNDQELPCPLGPGECYELHVHCKTSFVGYF  
 PATVLWELLGPGESGSEGAGTFYIARFLAAVAHSPLAAQLKPMTPFKRTRITGNPVVTRIEEGERPDRA  
 KGYDLELSMALGTYYPPRLRQLPMLLQGTSTIFAPKEIAEIKAQLETALKWRNYEVKLRLLHLEELQ  
 MEHDIRHYDLESVPMTWDPVDQNPRLTLEVPGVTESRPSVLRGDHLLFALLSSETHQEDPITYKGFVHKV  
 ELDRVKLSFSMSLLSRFVDGLTFKVNFTFNRQPLRVQHRALELTGRWLLWPMLFPVAPRDVPLLPSPDKL  
 KLYDRSLESNPEQLQAMRHIVTGTTRPAPYIIFGPPGTGKTVTLVEAIKQVVKHLPKAHILACAPNSGA  
 DLLCQRLRVHLPSSIYRLLAPSRDIRMVPEDIKPCCNWDAKKGEYVFPKPKLQYRVLITTLITAGRLV  
 SAQFPIDHFTHFIDEAGHCMEPESLVAIAGLMEVKETGDPGGQLVLAGDPRQLGPVLRSPLTQKHGLGY  
 SLLERLLTYNSLYKKGPDGYPQFITKLLRNYSHTPTILDIPNQLYYEGELQACADVDRERFCRWAGLP  
 RQGFPYIFHGVMGKDEREGNSPFFNPEEAATVTSYLKLLAPSSKKGKARLSPRSVGVISPYRKQVEKI  
 RYCITKLDRELRLDDIKDLKVGVSVEEFQGGERSVILISTVRSQSFVQLDLDFNLGFLKNPKRFNVAVT  
 RAKALLIIVGNPLLLGHDPDWKVFLEFKENGGYTGCPFAKLDLQGGQNLQLGSKLSPSTSGPHSHDY  
 LPQEREGGGLSLQVEPEWRNEL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6169\\_g06.zip](https://cdn.origene.com/chromatograms/mk6169_g06.zip)

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_020963

**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.

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

**RefSeq:** [NM\\_020963.4](#)

**RefSeq Size:** 3767 bp

RefSeq ORF: 3012 bp

Locus ID: 4343

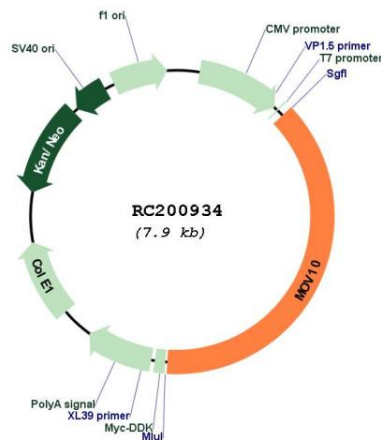
UniProt ID: [Q9HCE1](#)

Cytogenetics: 1p13.2

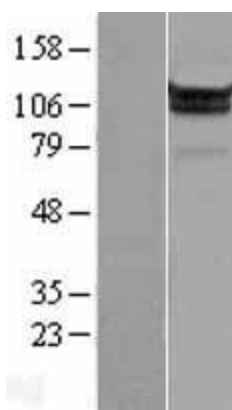
MW: 113.7 kDa

**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 chaperone 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]

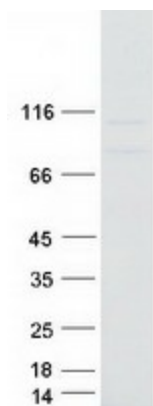
### Product images:



Circular map for RC200934



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



Coomassie blue staining of purified MOV10 protein (Cat# [TP300934]). The protein was produced from HEK293T cells transfected with MOV10 cDNA clone (Cat# RC200934) using MegaTran 2.0 (Cat# [TT210002]).