

## Product datasheet for **MR209210**

### Atad3a (NM\_179203) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Atad3a (NM_179203) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Atad3a
Synonyms:	2400004H09Rik; Atad3; mKIAA1273; Tob3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR209210 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGTCGTGGCTCTTCGGCATCAAGGGCCCCAAGGGCGAAGGCACAGGGCCTCCGCTGCCCTTGCCGCCCC  
 CTC AACCCGGGGCGGAGGGCGGGTACCGCGGGCGGGAGACCGCCATCGCCCAAGGACAAATGGAG  
 CAACTTCGACCCGACGGGCTGGAACGTGCGGCCAAAGCGGCTCGCGAGTTGGAGCACTCGCGCCATGCC  
 AAGGAGGCACTGAGTCTCGCACAGATGCAGGAGCAGACGCTGCAGCTGGAACAGCAGTCCAAGCTCAAGG  
 AGTACGAAGCTGCCGTAGAGCAGCTGAAGAGCGAACAGATCCGTGTGCAAGCCGAGGAAAGAAGGAAAC  
 CCTGACTGAAGAGACACGACAGCACCAGGCTAGGGCCAGTACCAGGATAAGCTCGCTCGACAGCGCTAT  
 GAGGACCAGCTGAAACAACAGCAACTTCTGAATGAAGAGAATTTAAGGAAACAAGAGGAGTCTGTGCAGA  
 AGCAGGAGGCCATACGGCGAGCCACTGTGGAGCGGAGATGGAGCTGAGGCATAAAAACGAGATGTTGCC  
 GGTGGAAGCTGAAGCCCAGCACGGGCCAAGGCTGATCGAGAGAATGCAGATATCATCCGGGAACAGATT  
 CGACTCAAGGCTGCTGAGCACCGCCAGACCATCTTGGAGTCTATCAGGACAGCTGGCACCTTGCTTGGTG  
 AAGGATCCGTGCATTTGTGACAGACTGGGACAAAGTGACAGCTACGGTGGCTGGTTGACACTATTAGC  
 TGTTGGAGTCTATTCTGCAAAGAATGCTACTTCTGTTGCTGGTCCGTATATTGAGGCCGATTGGGAAAG  
 CCGTCCTTGGTGAGAGAGACCTCCCGAATCTCAGTGCTAGAGGCATTGAGGCATCCCATCCAGGTCAGCA  
 GCGCACTGGTCAGCAGACCCAGGATGCATTGGAGGGCGTCATCCTCAGTCTAGCCTGGAGGCACGGGT  
 CCGAGATATTGCCATCGCAACAAGAAATACCAAGAAGAACAAAAGCCTGTATAGGAACGTTCTGATGAT  
 GGGCCCCGGGGACTGGCAAGACACTATTTGCCAAGAACTTGCCTGCATTGAGGCATGGACTACGCCA  
 TCATGACAGGCGGGGACGTGGCCCAATGGGGCGGGAGGGTGTGACTGCCATGCACAAGGCTTTCGACTG  
 GGCAAGCACAGCCGACGAGGCCTCCTGCTCTTTGTGGATGAAGCAGACGCCTTCCCTCAGGAAACGAGCG  
 ACTGAAAAGATAAGTGAAGACCTCAGGGTACTCTGAATGCCTTCTACAGGACAGGACAGCACAGTA  
 GTAAGTTCATGCTGGTCTGGCCAGTAACCAGCCTGAGCAGTTTGATTGGGCTATCAATGACCGCATTGA  
 CGAGATGGTCTGCTTTGCCCTGCCACAGCGGGAGGAGCGAGAGCGCCTGGTGAGAATGATTTTGACAAG  
 TATGTCCTTAAGCCGGCCACAGAAGGAAAGCAGCGCTTGAAGGTGGCCAGTTTGACTATGGAAAGAAAT  
 GCTCAGAGTTGCCAGTAACGGAGGGGATGTCAGGCCGGGAGATTGCTCAGCTTGCTGTGGCGTGGCA  
 GGCCATGGCATATTCATCTGAGGATGGAGTCTCACGGAAGCTATGATGGATGCCCGTGTGCAGGATGCT  
 GTGCAGCAGCACCAGCAGAAGATGCAGTGGCTTAAAGTAGAGAGACCCGATTCCAGACCAACAAGCCG  
 CACATCCTTCACTCCTCAGCTGC

**ACGCGT**ACGCGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR209210 protein sequence  
 Red=Cloning site Green=Tags(s)

MSWLFGIKGPKEGTPPLPLPPAQPGEAGGGDRGAGDRPSPKDKWSNFDPTGLERAAKAARELEHSRHA  
 KEALSLAQMEEQLQLEQQSKLKEYEAAVEQLKSEQIRVQAEERRKTLTEETRQHQAQYQDKLARQRY  
 EDQLKQQQLLNEENLRKQEEVQKQEAIRRATVEREMELRHKNEMLRVEAEARARAKADRENADIIREQI  
 RLKAAEHRQTILESIRTAGTLLGEGFRAFVTDWDKVTATVAGLTLAVGVYSAKNATSVAGRYIEARLGK  
 PSLVRETSRISVLEALRHPIQVSRRLVSRPQDALEGVILSPSLEARVRDIAIATRNTKKNKSLYRNVLMY  
 GPPGTGKTLFAKKLALHSGMDYAIMTGGDVAPMGREGVTAMHKVFDWASTSRRGLLLFVDEADAF LRKRA  
 TEKISEDLRATLNAFLHRTGQHSKFMVLVLSNQPEQFDWAINDRIDEMVCFALPQREERERLVRMYFDK  
 YVLKPATEGKQRLKVAQFDYGGKCEVAQLTEGMSGREIAQLAVAWQAMAYSSSEDGVLTEAMMDARVQDA  
 VQHQQKMQWLKVERPDSQTNKPPHPSLLSC

**TR**TRPLEQKLI SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**


**ACCN:** NM\_179203

**ORF Size:** 1776 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\\_179203.3](#)

**RefSeq Size:** 2426 bp

**RefSeq ORF:** 1776 bp

**Locus ID:** 108888

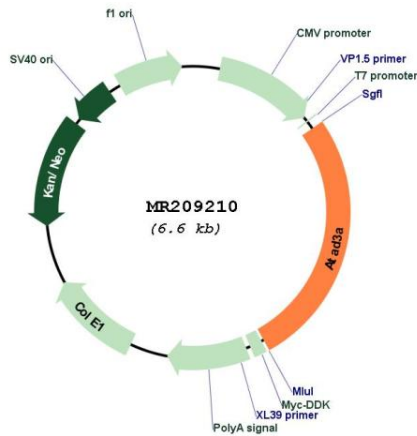
**UniProt ID:** [Q92511](#)

**Cytogenetics:** 4 E2

**MW:** 66.7 kDa

**Gene Summary:** Essential for mitochondrial network organization, mitochondrial metabolism and cell growth at organism and cellular level. May play an important role in mitochondrial protein synthesis. May also participate in mitochondrial DNA replication. May bind to mitochondrial DNA D-loops and contribute to nucleoid stability. Required for enhanced channeling of cholesterol for hormone-dependent steroidogenesis (By similarity).[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR209210