

## Product datasheet for MR205530

### Atad1 (NM\_026487) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Atad1 (NM_026487) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Atad1
Synonyms:	4921525H23Rik; AW107648; Thorase
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR205530 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGTACATGCTGAAGCCTTTTCTCGTCCATTGAGTCGGAATGAAGTTGTCGGTTAATTTTCCGTTTAA  
CAATATTTGGTGCAGTAACGTAACCTTCACTATTAATGGATGGTAGATGCCATTGACCCACCAGGAAGCA  
GAAGGTAGAAGCTCAGAAACAGGCGGAAAACTGATGAAGCAAATGGTGTGAAAAATGTGAAGCTTTCA  
GAATATGAAATGAGTATTGCTGCTCATCTAGTAGACCCTTAAATATGCATGTTACTTGGAGTGATATAG  
CAGGTTTATAGATGACGTCATTACAGATCTGAAAGACACAGTCATCTTACCTATCAAAAAGAAGCATTGTT  
TGAGAATTCAGACTACTGCAGCCTCCAAAAGGTGTTCTTCTGTATGGACCTCCAGGCTGTGGGAAAACA  
TTAATTGCCAAAGCAACAGCCAAAGAAGCAGGCTGTCGGTTCATTAACCTCCAGCCTTCGACACTGACTG  
ATAAGTGGTATGGAGAATCTCAAAAAGTGGCTGCTGCTGTTTTCTCCCTTGCCATAAAGCTACAGCCTTC  
TATCATATTTATTTGATGAAATAGACTCTTCTACGAAATCGTCCAGTTCTGACCACGAAGCTACAGCG  
ATGATGAAAGCTCAGTTTATGAGTCTCTGGGATGGACTGGACTGATCACAGCTGCCAGGTTATAGTAA  
TGGGAGCTACCAATCGCCCTCAAGACCTTGACTCCGCTATAATGCGAAGAATGCCTACACGATTTTCATAT  
TAACCAGCCTGCTCTAAAACAAAGAGAAGCAATTTTAAAGCTCATCTTGA AAAATGAAAATGTGGATAGA  
CACGTAGATCTTCTAGAAGTTGCCAGGAACTGATGGATTTTTCAGGAAGTGACCTAAAAGAAATGTGTC  
GGGATGCCGCCCTCCTCTGTGTACAGGAAATATGTCAATTCATACATCAGAAGAGAGTCACGATGAAGATGA  
AATCCGGCCTGTGCAACAGCAGGACCTGCATCGGCAATTGAAAAGATGAAGAAGTCAAAGGATGCAGCC  
TTTCAGAAATGTTCTAACTCACGTTTGTAGAT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR205530 protein sequence  
 Red=Cloning site Green=Tags(s)

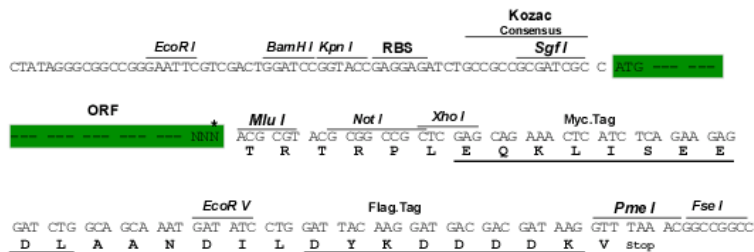
MVHAEAFSRPLSRNEVVGLIFRLTIFGAVTYFTIKWMVDAIDPTRKQKVEAQKQAEKLMKQIGVKNVKS  
 EYEMSIAAHLVDPLNMHVTWSDIAGLDDVITDLKDTVILPIKKKHLFENSRLQPPKGVLLYPPGCGKT  
 LIAKATAKEAGCRFINLQPSTLTDKWYGESQKLA AVFSLAIKLP SII FIDEIDSFLRNRSSDHEATA  
 MMKAQFMSLWDGLDTHSCQVI VMGATNRPQDL DSAIMRRMPTRFHINQPALKQREAILKLILKNENVDR  
 HVDLLEVAQETDGFSGSDLKEMCRDAALLCVREYVNSTSEESHDEDEIRPVQQDLHRAIEKMKKSKDAA  
 FQNVLTHVCLD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_026487

**ORF Size:** 1086 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\\_026487.3](#), [NP\\_080763.2](#)

**RefSeq Size:** 2813 bp

**RefSeq ORF:** 1086 bp

**Locus ID:** 67979

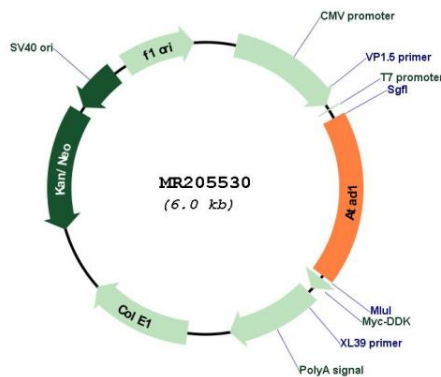
**UniProt ID:** [Q9D5T0](#)

**Cytogenetics:** 19 C1

**MW:** 40.7 kDa

**Gene Summary:** ATPase that plays a critical role in regulating the surface expression of AMPA receptors (AMPA), thereby regulating synaptic plasticity and learning and memory. Required for NMDA-stimulated AMPAR internalization and inhibition of GRIA1 and GRIA2 recycling back to the plasma membrane; these activities are ATPase-dependent.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR205530