

## Product datasheet for **RR212927**

### Atad1 (NM\_001035002) Rat Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Atad1 (NM\_001035002) Rat Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Atad1  
**Synonyms:** Ab2-088  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >RR212927 representing NM\_001035002  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGGTACATGCTGAAGCCTTTTCTCGTCCATTGAGTCGGAACGAAGTTGTCGGTTAATTTTTCGTTTAA  
CAATCTTTGGTGCAGTAACATACTTCACTATTAATGGATGGTAGATGCCATTGACCCACCAGGAAGCA  
GAAAGTGAAGCTCAGAAACAGGCGGAAAACTGATGAAGCAAAATGGTGTGAAAAATGTGAAGCTTTCA  
GAGTATGAGATGAGTATTGCTGCTCATCTGGTAGACCCTCTTAATATGCATGTTACTTGGAGTGATATAG  
CAGGTTTATAGATGATGTTATTACAGATCTGAAAGACACAGTCATCCTACCTATCAAAAAGAAGCATTGTT  
TGAGAATTCAGACTTCTGCAGCCTCCCAAAGGTGTTCTCCTGTATGGACCTCCGGGCTGTGGGAAAAACA  
TTAATTGCCAAAGCGACAGCCAAAGAAGCGGGCTGTCGATTTATTAACCTTCAGCCTTCCACACTGACAG  
ATAAGTGGTATGGAGAATCTCAGAACTGGCTGCTGCTCTTCTCCCTGGCCATAAAGCTACAGCCGTC  
TATCATATTTATCGATGAAATAGACTCATTCTACGAAATCGTTCCAGTCCGACCACGAAGCTACAGCA  
ATGATGAAAGCCAGTTTATGAGTCTTTGGGATGGACTGGACACTGATCACAGCTGCCAGGTCATAGTGA  
TGGGAGCTACCAATCGTCCTCAAGACCTTGACTCTGCTATAATGAGAAGAATGCCACAAGATTTTCATAT  
TAACCAGCCTGCTCTAAAACAAAGAGAAGCAATTTTAAAACATCTTGAAAAATGAAAAATGTGGATAGA  
CATGTAGATCTTCTAGAAGTTGCCAGGAACTGATGGGTTTTTCAGGAAGTGACCTAAAAGAAATGTGTC  
GAGATGCTGCCCTCCTCTGCGTCAGGGAATATGTCAATTCTACATCAGAAGAAAGTCATGACGAAGATGA  
AATCCGGCCTGTGCAGCAGCAGGACTTGTCATCGGGCAATTGAGAAGATGAAGAAATCAAAGGATGCAGCG  
TTTCAGAGCGTTCTGACTCACGTTTGTAGAT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RR212927 representing NM\_001035002  
 Red=Cloning site Green=Tags(s)

MVHAEAFSRPLSRNEVVGLIFRLTIFGAVTYFTIKWMVDAIDPTRKQKVEAQKQAEKLMKQIGVKNVKLS  
 EYEMSI A AHLVDPLNMHVTWSDIAGLDDVITDLKDTVILPIKHKHLFENSRLQPPKGVLLYGPPGCGKT  
 LIAKATAKEAGCRFINLQPSTLTDKWYGESQKLA AVFSLAIKLP S IIFIDEIDSFLNRSSSDHEATA  
 MMKAQFMSLWDGLD TDHSCQVI VMGATNRPQDL DSAIMRRMPTRFHINQPALKQREAILKLILKNENVDR  
 HVDLLEVAQETDGFSGSDLKEMCRDAALLCVREYVNSTSEESHDEDEIRPVQQDLHRAIEKMKKSKDAA  
 FQSVLTHVCLD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

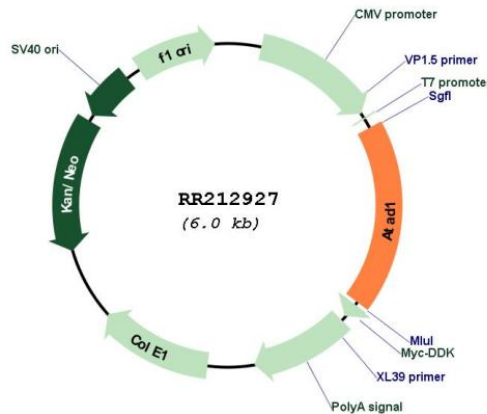
**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_001035002

<b>ORF Size:</b>	1083 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001035002.1</a> , <a href="#">NP_001030174.1</a>
<b>RefSeq Size:</b>	2330 bp
<b>RefSeq ORF:</b>	1086 bp
<b>Locus ID:</b>	309532
<b>UniProt ID:</b>	<a href="#">Q505J9</a>
<b>Cytogenetics:</b>	1q52
<b>MW:</b>	40.7 kDa
<b>Gene Summary:</b>	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]