

## Product datasheet for MC211393

### Atat1 (NM\_001142745) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Atat1 (NM\_001142745) Mouse Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Atat1  
**Synonyms:** 0610011P08Rik; 2610008K08Rik; 2610110G12Rik; 3110080J08Rik; Mec17; TAT  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >MC211393 representing NM\_001142745  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGAGTTC**CCGTT**CGATGTGGATGCGCTGTTCCCGAGCGGATCACCGTCTGGACCAGCACCTGCGGC  
 CTCGGCCCGCCGACCCGAACCAACGCCGGCCGTGGATCTGCAGCAGCAATCATGACTATTGT  
 AGATGAGCTGGCAAGGCTTCTGCCAAGGCGCAGCACCTCCCTGCACCCATCACCAGCGCTTTGAGGATG  
 CAAAGCAACCGGCACGTTATTTACATACTGAAGGACACCTCAGCCCGACCGGCAGGGAAAGGAGCCATTA  
 TTGGTTTCTCAAAGTTGGATACAAGAAGCTCTTTGTACTGGATGACCGGGAGGCTCACAATGAGGTAGA  
 ACCCCTTTGCATTCTGGACTTTTACATCCACGAGTCGGTGCAACGGCATGGCCACGGGCGAGAATTTTT  
 CAGCATATGTTACAGAAAGAGCGAGTGGAGCCCCACCAACTGGCCATTGACCGACCATCGCCGAAGCTGC  
 TCAAGTTCTGAATAAGCACTACAACCTGGAGACCACAGTCCCACAGGTGAACAACCTTTGTCATCTTTGA  
 AGGCTTCTTTGCCATCAGCACCGGCCCCCACTTCTCTCTGAGAGCAACTCGACACTCTCGTGTCTGCT  
 GTGGCCGATCCCATACCTGCTGCTCCAGCACGGAAGCTGCCACCAAAAAGAGCAGAGGGAGACATTAAGC  
 CATACTCTCCAGTGACAGAGAATTCCTGAAGGTAGCTGTGGAGCCTCCTTGGCCCTGAACAGGGCCCC  
 TCGGCGTGCCACACCTCCAGCCACCCACCTCCAGTTCTAGCAGCCTGGGCAACTCACCAGGATCGGGGT  
 CCCCTTCGGCCCTTTGTTCCAGAGCAGGAGCTGCTTCGCTCCCTGCGTCTCTGTCCCCACACCCTACTG  
 CACGCCTTCTGCTGGCCACTGACCTGGAGGCAGCCAGCCAGCGCAGACGCACCAGCTCCCTTCCCCG  
 ATCTGATGAGAGTCGATACTGA

**ACGGT**ACGGCCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI  
**ACCN:** NM\_001142745



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<b>Insert Size:</b>	1002 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<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>	<u><a href="#">NM_001142745.1</a></u> , <u><a href="#">NP_001136217.1</a></u>
<b>RefSeq Size:</b>	2068 bp
<b>RefSeq ORF:</b>	1002 bp
<b>Locus ID:</b>	73242
<b>UniProt ID:</b>	<u><a href="#">Q8K341</a></u>
<b>Cytogenetics:</b>	17 B1
<b>Gene Summary:</b>	<p>Specifically acetylates 'Lys-40' in alpha-tubulin on the luminal side of microtubules. Promotes microtubule destabilization and accelerates microtubule dynamics; this activity may be independent of acetylation activity. Acetylates alpha-tubulin with a slow enzymatic rate, due to a catalytic site that is not optimized for acetyl transfer. Enters the microtubule through each end and diffuses quickly throughout the lumen of microtubules. Acetylates only long/old microtubules because of its slow acetylation rate since it does not have time to act on dynamically unstable microtubules before the enzyme is released. Required for normal sperm flagellar function. Promotes directional cell locomotion and chemotaxis, through AP2A2-dependent acetylation of alpha-tubulin at clathrin-coated pits that are concentrated at the leading edge of migrating cells. May facilitate primary cilium assembly.[UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (2) lacks a few of 3' exons but has an alternate 3' exon, as compared to variant 1. The resulting isoform (2) has a shorter and different C-terminus, as compared to isoform 1. It should be noted that this variant contains an overlapping upstream ORF that may interfere with the translation of the annotated CDS.</p>