

## Product datasheet for **MR208444**

### Aatf (NM\_019816) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Aatf (NM_019816) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Aatf
Synonyms:	4933415H02Rik; 5830465M17Rik; Che-1; Trb
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR208444 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCGGCGCCGAGCCCTTGGCTCTGCAGCTGGAACAGTTGCTGAATCCGAGACCCGCTGAGGCGGATC  
 CTGAGGCCGACCCGAGGAGGCCACTAGAGCCAGAGTGATTGACAGGTTTGATGAAGGGGAAAGAGAGAA  
 AGATGATCTGGCAGTGAGTAGCATTAGAAAAGTTGGCACCAGTCTCCCTCTTGACACCGACAAAAGGTAT  
 TCTGGCAAGACCCTTCTAGGAAAGCTTGGAAAGAAGACCATTGGGAGCAGGCTCTGCCAAGTTCATCTG  
 ATAACGAAGCATCTGATGAGGGAGGATCTGAAGATGGGGATTGAGGGCCCTGGGCTGGAGGAGATCTC  
 AGAAGATGTTGACGAAGACTTAGAAGACAACAAAATATCTGATGAGGGAGGATCTGAAGATGGGGATTCA  
 GAGGGCCTGGGCCTGGAAGATTCTCAGAAGATGTTGAGGAGGACTTAGAAGGTGAGGATGAGGAAGACA  
 GAGAAGAAGACAGGAACAGTGAAGATGATGGTGTGGTGGCAGCCTTCTCCAGTGTCAAAGTTTCTGAGGA  
 AGTGGAAAAGGAAGAGCTGTGAAGAATCAGATAGCATTGTGGACCAGCTCTTGAAGGAAGGATCAAG  
 CTACAAAAGCTCTCTTGACTACCAATCAGTTGCCTCAACCAGATGTTTTCCCTGTCTTCAAGGACAAA  
 GTGGCCCAAGAATTTGCCAGTGCTCTGAAAAATAGTCACAAAGCACTTAAAGCCTTGTTAAGGTCATTGGT  
 GGATCTTCAGGAAGAGTTGCTTTTCCAGTACCCAGACACGAGACATATAGTAAATGGGGCGAAACCAAT  
 ACAGAGAGTGAGGAGATTTCCAGTGAAGATGATGAGCTAGTGGGAGAGAAGAAGAAACAACGAAAGGCC  
 CACCCAAGAGGAAGCTAGAGATGGAGGACTATCCAGCTTCATGGCAAAGCGCTTTGCTGACTTCACCAT  
 CTATAGGAATCACACACTACAGAAATGGCATGATAAAACCAAGCTTGCTTCTGAAAACCTGGGCAAGGGT  
 TTTGGTGCCTTCGAACGCTCGATCTTGACTCAGATCGATCATATCATGATGGACAAGAAAGATTGCTTC  
 GGAGGACACAGACCAAGCGCTCTGCCTACCGATTCTTGGCAAACCGGAGCCAGTCCCTGAGCCTGTTGC  
 AGAGACCTTGCCAGGAGAACCAGAGACGCTTCTCAGGGCCCTGCCAATGCCACCTGAGGGACTTGGAT  
 GAGGAGATATTTGATGATGATGACTTTTACCACCAGCTCCTTCGAGAACTCATAGAGCGGAAAACAGCT  
 CTTTGGATCCAAATGATCAGGTGGCCATGGGAAGGCAGTGGCTTGCAATCCAGAACTACGAAGCAAAAT  
 CCGCAAGAAGGTAGATAGAAAAGCCAGCAAAAGGAAGAACTTCGGTTCCATGTCCTTAGCAAGCTCCTG  
 AGTTTCATGGCACCTATTGACCACCCGAATGAGTGATGATGCCAGGACGGAGTTGTTTCGATCTCTTT  
 TCGGCCAGCTCAACCCTCTGATGCAGACCGTGGGAAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR208444 protein sequence  
 Red=Cloning site Green=Tags(s)

MAAPQPLALQLEQLLNPRPREADPEADPEEATRARVIDRFDEGEEKDDLAVSSIRKLAPVSLLDTDKRY  
 SGKTTSRKAWKEDHWEQALPSSSDNEASDEGGSEDDGSEGLGLEEISEDVDELDENKISDEGGSEDDGS  
 EGLGLEEFSEDVEEDLEGEDEEDREEDRNSEDDGVVAAFSSVKVSEEVKGRAVKNQIALWDQLLEGRIK  
 LQKALLTTNQLPQPDVFPVFKDKGGPEFASALKNSHKALKALLRSLVDLQEELLFQYPTDRHIVNGAKPN  
 TESEEISSEDELVGEKKQRKAPPKRKLEMEDYPSFMAKRFADFTIYRNHTLQKWHDKTLASGKLGK  
 FGAFERSILTQIDHIMDKERLLRRTQTKRSAYRVLGKPEPVPEVAETLPGEPELTPQGPANAHLRDL  
 EEIFFDDDDFYHQLLRELIERKTSLLDPNDQVAMGRQWLAIQKLRKIRKVDKASKGRKLRFHVLSKLL  
 SFMAPIDHTAMSDDARTELFRLSFLGQLNPPDADR GK

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



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

**ACCN:** NM\_019816

**ORF Size:** 1581 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\\_019816.1](#), [NP\\_062790.1](#)
**RefSeq Size:** 1844 bp

**RefSeq ORF:** 1581 bp

**Locus ID:** 56321

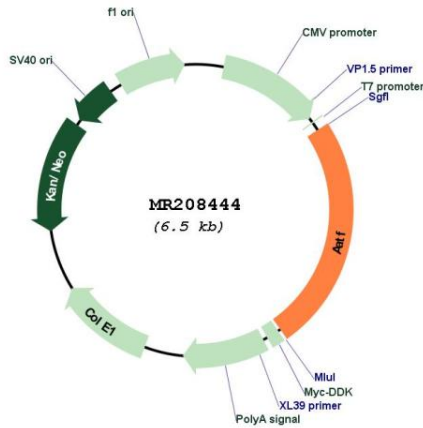
**UniProt ID:** [Q9JKX4](#)

**Cytogenetics:** 11 C

**MW:** 59.5 kDa

**Gene Summary:** May function as a general inhibitor of the histone deacetylase HDAC1. Binding to the pocket region of RB1 may displace HDAC1 from RB1/E2F complexes, leading to activation of E2F target genes and cell cycle progression. Conversely, displacement of HDAC1 from SP1 bound to the CDKN1A promoter leads to increased expression of this CDK inhibitor and blocks cell cycle progression (By similarity).[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR208444