

## Product datasheet for **MR224176**

### **A1cf (NM\_001081074) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	A1cf (NM_001081074) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	A1cf
Synonyms:	1810073H04Rik; Acf; ACF64; ACF65; ASP; MCM; mer; MerCreMer; Tg(Myh6-cre/Esr1*)1Jmk
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MR224176 representing NM\_001081074  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGAATCAAATCACAATCCGGGGATGGATTGAGCGGCACCCAGAAGGAAGCGGCACTCCGCGCACTGG  
 TCCAGCGCACAGGATATAGCTTGGTCCAGGAAAATGGACAAAGGAAGTATGGTGGCCCTCCACCAGGCTG  
 GGATTCTACACCCCCAGAAAGGGCTGCGAGATTTTCATTGGGAAACTCCCCGGGACCTCTTTGAGGAT  
 GAACTCATACCATTGTGTGAAAAAATTGGTAAATTTATGAAATGAGATTGATGATGGATTTTAATGGTA  
 ACAACAGAGGCTATGCATTTGTAACATTCTCAAATAAGCAGGAAGCCAAGAATGCAATCAAGCAACTTAA  
 TAATTATGAAATTCGGACTGGCCGTCTCTTGGGAGTCTGTGCCAGTGTGGACAATTGCCGATTGTTTGTG  
 GGAGGAATCCCCAAAACCAAAAAGAGGGAAGAAATCTTATCAGAGATGAAAAAGTCACAGAAGGAGTTG  
 TTGATGTCATTGTCTACCAAGTCTGTGATAAAAACCAAAAACCGGGGATTTGCCTTTGTGGAATATGA  
 GAGTCACCGAGCAGCCGCTATGGCTAGGCGGAGGCTGCTGCCAGGAAGAATTCAGTTGTGGGGACATCCT  
 ATTGCAGTAGACTGGGCAGAACCAAGAAGTTGAAGTTGATGAGGACACAATGTCTTCCGTGAAAAATCCTGT  
 ACGTAAGGAACCTTATGCTGTCTACCTCGGAAGAAATGATTGAAAAGGAATCAACAGTATTAACCAGG  
 TGCTGTGGAAAGAGTGAAGAAGATCCGAGACTACGCTTTTGTGCACTTCAGTAACCGAGAAGATGCAGTT  
 GAAGCCATGAAGGCTTTGAATGGCAAGGTGCTGGATGGTCCCAATAGAAGTGACCTTGGCCAAGCCAG  
 TGGACAAGGACAGTTATGTTAGGTACACCCGGGACCCGGTGGCAGGAACACCATGCTGCAAGGAGAATA  
 CACCTACCCTCTGAGCCATGTTTATGACCCTACCACAACCTACCTTGGAGCTCCTGTCTTCTATACCCCC  
 CAAGCCTATGCAGCCATTCCAAGTCTTCATTTCCAGCTACTAAGGACATCTCAGCAACAGGGCTCTCA  
 TCAGGACCCCTTCTGTGAGAGAAATTTACATGAATGTCCTGTAGGGGCTGCGGGGTGAGAGGACTGGG  
 CGGCCGTGGGTATTTGGCATACACAGGCCTGGGTGAGGATACACAGTCAAAGGAGACAAGAGAGAAGAC  
 AAATCTATGATCTTCTGCTGGATGGAGCTACCCCGATGAATACTGTCTCTTTAAAACCAAGGAA  
 TTAACCTGTCTCAGATATTAGAAGAAATCTGTGAGAAAAATAACTGGGGACAGCCAGTGTACCAACT  
 GCATTCTGCCATTGGACAAGATCAAAGACAGTTATTCCTCTACAAAGTAATATCCAGCGCTGGCCAGC  
 CAGAATCTGCAATCCACCCTTTCATACCACAAAGCTAAGCGCCTATGTGGATGAAGCGAAGAGGTATG  
 CTGCAGAGCACACTCTACAGACTAGGCATCCCCACAGAAGGAGGGGACGCTGGGACTACAGCACCCAC  
 GGCCACTTCTGCCACTGTGTTCCAGGATATGCTGTCCCAGTGCACCCGCTCCTGTGTCTACAGCCAG  
 CTAAGCAAGCAGTGACACTTGGACAAGACTTAGCAGCATATACAACCTATGAGGCTACCCCTACTTTTG  
 CACTGACCACCCGAGCGATGCATATGGAACCTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR224176 representing NM\_001081074  
 Red=Cloning site Green=Tags(s)

MESNHKSGDGLSGTQKEAALRALVQRTGYSLVQENGQRKYGGPPPGWDSTPPERGC EIFIGKLPRDLFED  
 ELIPLCEKIGKIYEMRLMDFNGNRRGYAFVTFSNKQEAQNAIKQLNNEYIRTGRLLGVCASVDNCRFLV  
 GGIPKTKKREEILSEMKKVTEGVVDVIVYPSAADKTKNRGFAFVEYESHRAAAMARRRLLPGRIQLWGH  
 IAVDWAEPVEVEDEDTMSSVKILYVRNMLSTSEEMIEKEFNISIKPGAVERVKKIRDYAFVHFSNREDAV  
 EAMKALNGKVLGDSPIEVTLAKPVDKDSYVRYTRGTGGRNMLQGEYTYPLSHVYDPTTTYLGAPVFYTP  
 QAYAAIPSLHFPATKGHLNRALIRTPSVREIYMNVPVGAAGVRGLGGRGYLAYTGLGRGYHVKGDKRED  
 KLYDLLPGMELTPMNTVSLKPQGIKLPQILEEICQKNNWGPVYQLHSAIGDQRQLFLYKVTIPALAS  
 QNPAIHPFIPPKLSAYVDEAKRYAAEHTLQTLGIPTEGGDAGTTAPTATSATVFPYAVPSTATPVSTAQ  
 LKQAVTLGQDLAAYTTYEVYPTFALTTRGDAYGTF

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mm9078\\_c12.zip](https://cdn.origene.com/chromatograms/mm9078_c12.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001081074

**ORF Size:** 1785 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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\\_001081074.2](#)

**RefSeq Size:** 3828 bp

**RefSeq ORF:** 1788 bp

**Locus ID:** 69865

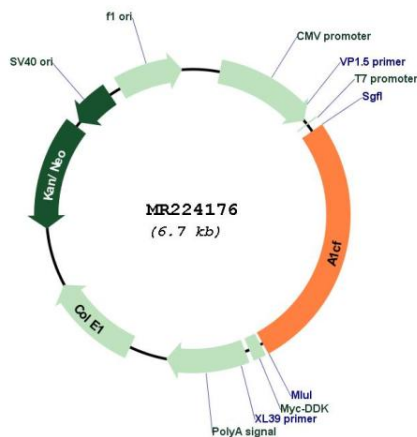
**UniProt ID:** [Q5YD48](#)

**Cytogenetics:** 19 C1

**MW:** 65.7 kDa

**Gene Summary:** Essential component of the apolipoprotein B mRNA editing enzyme complex which is responsible for the postranscriptional editing of a CAA codon for Gln to a UAA codon for stop in APOB mRNA. Binds to APOB mRNA and is probably responsible for docking the catalytic subunit, APOBEC1, to the mRNA to allow it to deaminate its target cytosine. The complex also seems to protect the edited APOB mRNA from nonsense-mediated decay (By similarity). [UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR224176