

## Product datasheet for **MR216683**

### Ahcyl2 (NM\_001171000) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Ahcyl2 (NM_001171000) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ahcyl2
Synonyms:	4631427C17Rik; Adohcyase3; AI227036; mKIAA0828
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR216683 representing NM\_001171000  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGTCGGTGCAGTTGTGTCAGCAGCGGCAGCCGCAAGGTGCCTGAGGTGGAGCTGAAGGATCTGAGCC  
 CCTCCGAGGCGGAGCCCCAGTTGGGACTGAGCGCGGCCGGCGTGGGCGCCATGGTACCCCCAGCGGGTGG  
 CGGGGACCCAGAGGCTCCAGCTCCGGCTCCCGCGGCGGAGCGGCCCGGCCCGGCCCGGGCTCGGGG  
 CCCACCGCGGCTCTGAGCCCTGCGGCGGGGAAGGTCCCTCAAGCGTCCGCCATGAAGCGGAGCGACCCTC  
 ATCACCAGCACCAGCGGCATCGCGACGGCGGAGGCCTTGGTACGCCCCGACGGCACGGTACCAGAGGC  
 GCCCGCACGGTCAAGAAGATTCAGTTTGTGACCAGAAGCAGGAATCAACAAACGTCCCACAAAATC  
 GGACGTCGCTCTTGTCTCGTCCATCTCTCAGTCATCTACTGACAGCTATAGCTCAGCTGCCTCATATA  
 CAGATAGCTCTGACGATGAGACATCCCCAGGGACAAGCAGCAAAAGAACTCTAAGGGAAGTAGCGACTT  
 CTGTGTCAAGAACATCAAACAAGCGGAGTTTGGACGCAGAGAAAATTGAAATTGCTGAGCAAGAGATGCCT  
 GCCTTGATGGCTTAAAGGAAGAGAGCCCAAGGAGAAAAGCCTTTGGCTGGAGCCAAAATTGTGGTTGTA  
 CGCACATCACTGCTCAGACAGCCGTGCTTATGGAGACTGGGTGCTCTGGGGGCACAGTGCCGATGGGC  
 TGCTGCAACATCTACTCCACCCTCAATGAAGTGGCTGCTGCTCTCGCAGAAAGTGGGTTTCCCCTCTTT  
 GCCTGGAAGGAGAATCAGAAGATGACTTTTGGTGGTGCATTGACAGATGCGTGAATGTGGAGGGCTGGC  
 AGCCAAACATGATACTGGATGATGGAGGAGATCTGACTCACTGGATTTATAAAAAGTATCCCAACATGTT  
 TAAAAAATCAAAGGCATAGTCGAGGAGAGTGTACTGGAGTCCATAGGCTGTACCAACTGTCCAAAGCT  
 GGAAGCTGTGTGTTCCCGCCATGAACGTCAATGACTCAGTCACTAAGCAGAAAATTTGATAACCTCTACT  
 GTTGCCGTGAATCTATTCTTGACGGACTTAAAAGGACAACAGATATGATGTTTGGTGGAAAGCAGGTGGT  
 GGTCTGTGGCTATGGAGAGGTGGGAAAGGGGTGCTGCGCTGCTCTGAAAGCCATGGGCTCCATTGTGTAC  
 GTGACTGAGATTGACCCCATCTGTGCCCTGCAAGCCTGTATGGATGGATTCCGACTAGTGAAGCTGAATG  
 AAGTCATCCGACAGGTCGACATTGTTATTACTTGCACAGGGAACAAGAATGTGGTAACCAGAGAGCACTT  
 GGACCGTATGAAGAATAGCTGCATCGTTTGAACATGGGCCATTCCAACACCGAGATTGATGTGGCCAGC  
 CTGCGGACACCAGAACTGACCTGGGAGAGAGTAAGATCCCAAGTTGATCATGTGATATGGCTGATGGCA  
 AGAGGATAGTACTGCTGGCAGAGGGCCGCTACTGAATCTCAGCTGCTCCACAGTGCCTACATTTGTGCT  
 CTCCATCACTGCTACCACTCAGGCTCTCGCCTTGATAGAATTTACAATGCTCCTGAGGGTGCCTATAAG  
 CAAGATGTGTACCTGCTACCAAGAAAATGGATGAGTATGTGGCAAGCCTACACCTGCCACCTTTGATG  
 CCCACCTGACAGAGCTAACAGATGAACAAGCCAAGTATCTGGGACTCAACAAGAATGGACCCCTCAAGCC  
 TAACTACTACAGGTAT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR216683 representing NM\_001171000  
 Red=Cloning site Green=Tags(s)

MSVQVVSAAAAAKVPEVELKDLSPSEAEPLGLSAAAVGAMVPPAGGGDPEAPAPAPAAERPPAPGPGSG  
 PTAALSPAAGKVPQASAMKRSDPHHQHQRHRDGGREALVSPDGTVTEAPRTVKKIQFADQKQEFNKRPTKI  
 GRRSLRSISQSSTDSYSSAASYTDSDDETS PRDKQQKNSKGSDFCVKNIKQAEFGRRREIEIAEQEMP  
 ALMALRKRAQGEKPLAGAKIVGCTHITAQTAVLMETL GALGAQCRWAACNIYSTLNEVAALAESGFVVF  
 AWKGESEDDFWCIDRCVNVVEGWQPNMILDDGGDLTHWIYKKYPNMFKKIKGIVEESVTGVHRLYQLSKA  
 GKLCVPAMNVNDSVTKQKFDNL YCCRESILDGLKRTTDMFGGKQVVVCGYGEVKGCCAAALKAMGSIVY  
 VTEIDPICALQACMDGFRLVKLNEVIRQVDIVITCTGNKNVVTREHLDRMKNSCIVCNMGHSNTEIDVAS  
 LRTPEL TWERVRSQVDHVIWPDGKRIVLLAEGRLNLSCSTVPTFVLSITATTQALALIELYNAPEGRYK  
 QDVIYLLPKMDEYVAVSLHLPFD AHL TELTDEQAKYLG LNKNGPFKPNYYRY

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_001171000

ORF Size: 1836 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\\_001171000.2](#), [NP\\_001164471.2](#)

RefSeq Size: 5215 bp

RefSeq ORF: 1839 bp

Locus ID: 74340

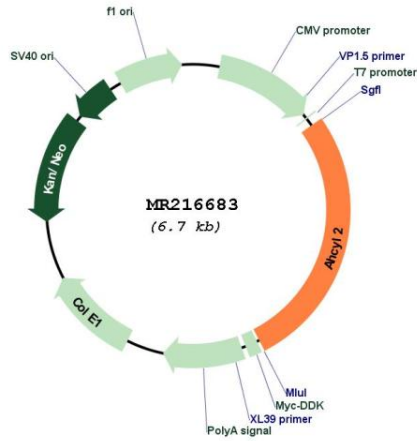
UniProt ID: [Q68FL4](#)

**Cytogenetics:** 6 A3.3

**MW:** 67.2 kDa

**Gene Summary:** May regulate the electrogenic sodium/bicarbonate cotransporter SLC4A4 activity and Mg(2+)-sensitivity. On the contrary of its homolog AHCYL1, does not regulate ITPR1 sensitivity to inositol 1,4,5-trisphosphate.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR216683