

Product datasheet for **MR219216**

Arid5a (NM_001172205) Mouse Tagged ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | Arid5a (NM_001172205) Mouse Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | Arid5a |
| Synonyms: | D430024K22Rik; Mrf1 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |



[View online »](#)

ORF Nucleotide Sequence:

>MR219216 representing NM_001172205
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCAGCACCTCCGGCCAAAGGGAACACAGAGCAGTCAGAAGAAGGTGACCTCCCGCAGCTTCTGTAT
 CCCCCAAGCCAGATGATGAGCAGAGCAGGAGCCAGAGCCCCACCCAGCTCCAGGACTCCCCTGAGGCAGG
 TGGGGAGCAGGAGGAGGAACAGGCCCTTCTGGTCAAGCCTCTACAAGTTCATGAAGGAGCGACACAGCC
 ATCGAGAGGGTGGCCCATCTTGGCTTCAAGCAGATTAACCTGTGGAAGATCTACAAGGCAGTGGAGAAGC
 TGGGGGCTATGAGCTGGTGACAGGCCGCCCTCTGGAAGAAGTGTATGATGAACTTGGCGGTAGCCC
 AGGCAGCACAGTGGCCACATGCACACGCCCCACTATGAGAGGCTGGTCTCCCATATGTGCGGCAT
 CTGAAGGGGGAGGACGACAAGCCACTGCCTCTACCAAGCCAGGAAGCAATAACAAGATGGCCAAGGAGC
 TGAGGGGAGACGATGGGACCACTGAGAAGCTGAAGAAGGCCAAGGACTCAGAGGAGAGCGGGTGGAGCA
 GACCACGCCAGGAAAGACCAAATCAGATGCCACTGGCCAGACACAGCTTCCCTGCCAGGGATCCTCGAGG
 GACAGCACAGAACAGCTGGGCCAGTATCTGGACCCTCTCCACCACTCACGGGTGCTAGTAGCTGCCCTG
 AGGCCTACAAGCGGCTCTTGTAAGCTTTACTGCAAAGGGGCGCATGGCATCATGTCAACCACTGGCCAA
 AAGAACTCTGGCCAGGTCAGCAAGGCAGAGGCCCTTGCAGTGCCAAGAAGAGGGCTGTCCGCATGGA
 GCAAGGAGCCCCAACAGGACATTAAGACAGTCCCAGAACCTAAGAGGGCCGGCTGAGAACTCTGAAC
 ACCAGTAACCCCCGGGAAGGATTGCAGGCCCTGGTGGGAGCACCAGGATGGAGGCCAAGTGGGCC
 CTGCCCTACAGCCCCATGTTCTCAGGCTGTTTTATGCGTACCCACCGAGGTGCTGAACTGTGAGC
 CAGCACCTAGGGACTTCTTCTCCGGCCTTAAAGACAGGGTGTCTGTTGGGACCACTGGTAAAGAAGAAG
 GTCCGACAACAAAGAGTCCCATCTGGTGGTGGGGATGCCAACCCCTCTGCATCCATAAAGG
 CAGCACAAAGAAAAGAAGTTTCTACCCAAACCAAGCCTGCTGGGTGCTCCCATGGCCAAGGTCCT
 ACTGAGAGGCTGGAGCCCCATCCCTCATCCAGTAGCCAGGCTTGGCAGTAAGCGCGCTTGAAG
 AAGAGGGATTCGCTCATGGTGGCAAGAACTGAGGGCAGTGTCTCCCTTCTGAAGGAGGTGGATTCCAA
 GGAGACTGGGGCAAGCCTGCAGCCCCTGGCTGGCTGTATCCTGTCTACTGGGCCAACCCGGGGCCC
 ACTCCTCCAGAGGCTACAGGGGCACCATGCTGCGGTGTCTCTAACTTACCGGTAGCGCAGACCCTC
 TGAAGGGCCAGGCTCACTCCCCTCAGCCCCCTGGTATCCCTGCTTCCAGCCACCTTCTGGCTAC
 AACAGGCTCTCACCTATGGCTGCCAGCCTGATGCATTTCCCTCCACGCCCTATGACGCTGTCTACGC
 AACAGACTGGGTCCAGCTTCGTCTGCCTGGCACATGCCACCCGTACAACCTATGCGGCACCTCACTTCT
 TCCACCTAACACCAAAGT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR219216 representing NM_001172205
 Red=Cloning site Green=Tags(s)

MAAPPKGNTEQSEEDLPQLPVSPKPDDEQSRQSPTQLQDSPEAGGEQEEQAFVLSLYKFMKERHTP
 IERVPHLGFKQINLWKIYKAVEKLGAYELVTGRRLWKNVYDELGGSPGSTSAATCTRRHYERLVLPYVRH
 LKGEDDKPLPPTKPRKQYKMAKELRGDDGTEKLLKAKDSEERRVEQTTPGKTKSDATGQTQLPCQGSSR
 DSTEQLGVPVSGSPPLTGASSCPEAYKRLLSSFYCKGAHGIMSPLAKKKLLAQVSKAEALQCQEEGCRHG
 ARSPNKDIQDSPQNLRGPAENSEHQLTPREGLQAPGGSTRMEAQVGPCPTAPMFSGCFHAYPTEVLKPV
 QHPRDFFSGLKDRVLLGPPGKEEGPTTKESHLVWGGDANHPSAFHKGSTRKRSFYPKPKACWVSPMAKVP
 TERPGAPSPHPSSPGLGSKRLEEEGF AHGGKLRVSPFLKEVDSKETGGKPAAPGLAVSCLLGPTPGP
 TPPEAYRGTMLRCPLNFTGSADPLKGQASLPFSPVLPFAFPAHLATTGSSPMAASLMHFPPTPYDAVLR
 NRLGPASSAWHMPPVTTYAAPHFHNLTKL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/ja2518_g04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001172205

ORF Size: 1770 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 or by calling 301.340.3188 option 3 for pricing and delivery.

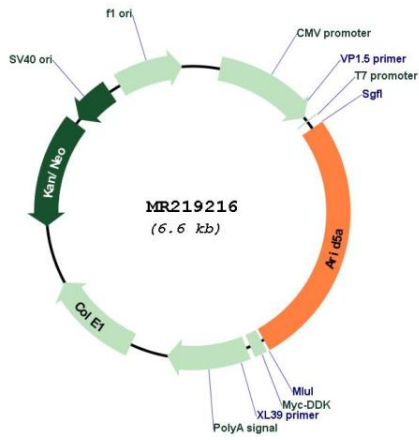
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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).

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| Reconstitution Method: | <ol style="list-style-type: none">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. |
| Note: | Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required. |
| RefSeq: | <u>NM_001172205.1, NP_001165676.1</u> |
| RefSeq Size: | 5699 bp |
| RefSeq ORF: | 1773 bp |
| Locus ID: | 214855 |
| UniProt ID: | <u>Q3U108</u> |
| Cytogenetics: | 1 B |
| MW: | 64.3 kDa |
| Gene Summary: | DNA-binding protein that may regulate transcription and act as a repressor by binding to AT-rich stretches in the promoter region of target genes (By similarity). May positively regulate chondrocyte-specific transcription such as of COL2A1 in collaboration with SOX9 and positively regulate histone H3 acetylation at chondrocyte-specific genes. May stimulate early-stage chondrocyte differentiation and inhibit later stage differentiation (PubMed:21346191). Can repress ESR1-mediated transcriptional activation; proposed to act as corepressor for selective nuclear hormone receptors (By similarity). As RNA-binding protein involved in the regulation of inflammatory response by stabilizing selective inflammation-related mRNAs, such as IL6, STAT3 and TBX21. Binds to stem loop structures located in the 3' UTRs of IL6, STAT3 and TBX21 mRNAs; at least for STAT3 prevents binding of ZC3H12A to the mRNA stem loop structure thus inhibiting its degradation activity. Contributes to elevated IL6 levels possibly implicated in autoimmunity processes. IL6-dependent stabilization of STAT3 mRNA may promote differentiation of naive CD4+ T-cells into T-helper Th17 cells (PubMed:23676272, PubMed:27022145). In CD4+ T-cells may also inhibit RORC-induced Th17 cell differentiation independently of IL6 signaling (PubMed:24782182). Stabilization of TBX21 mRNA contributes to elevated interferon-gamma secretion in Th1 cells possibly implicated in the establishment of septic shock (PubMed:27671645).[UniProtKB/Swiss-Prot Function] |

Product images:



Circular map for MR219216