

Product datasheet for **MG216827**

Arid5a (NM_001172206) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Arid5a (NM_001172206) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Arid5a
Synonyms:	D430024K22Rik; Mrf1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG216827 representing NM_001172206
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCACCTCCGGCCAAAGGGAACAGAGCAGTCAAGAAGGTGACCTCCCGCAGCTTCTGTATCCC
 CCAAGCCAGATGATGAGCAGAGCAGGAGCCAGAGCCCCACCCAGCTCCAGGACTCCCCTGAGGCAGGTGG
 GGAGCAGGAGGAGGAACAGGCCCTTCTGGTCAGCCTCTACAAGTTCATGAAGGAGCGACACAGCCCATC
 GAGAGGGTGCCCATCTTGGCTTCAAGCAGATTAACCTGTGGAAGATCTACAAGGCACTGGAGAAGCTGG
 GGGCTATGAGCTGGTGACAGGCCGCCCTCTGGAAGAAGCTGTATGATGAACTGGCGGTAGCCAGG
 CAGCACCAGTGCAGCCACATGCACAGCCGCCACTATGAGAGGCTGGTCTCCCATATGTGCGGCATCTG
 AAGGGGGAGGACACAAGCCACTGCCTCTACCAAGCCAGGAAGCAATAACAAGATGGCCAAGGAGCTGA
 GGGGAGACGATGGGACCCTGAGAAGCTGAAGAAGGCCAAGGACTCAGAGGAGAGGGGGTGGAGCAGAC
 CAGCCAGGAAAGACAAATCAGATGCCACTGGCCAGACACAGCTTCCCTGCCAGGGATCCTCGAGGGAC
 AGCACAGAACAGCTGGGCCAGTATCTGGACCCTCCACCACACTACGGGTGCTAGTAGCTGCCCTGAGG
 CCTACAAGCGGCTTGTCAAGCTTTACTGCAAAGGGGCGCATGGCATCATGTCAACACTGGCCAAAAA
 GAAACTCTGGCCAGGTGAGCAAGGCAGAGGCCCTTGAGTGCCAAGAAGAGGGGTGTCGCCATGGAGCA
 AGGAGCCCAACAAGGACATTCAAGACAGTCCCCAGAACCTAAGAGGGCCGGCTGAGAACTCTGAACACC
 AGCTAACCCCGGGAAGGATTGACAGGCCCTGGTGGGAGCACCAGGATGGAGGCCAAGTGGGCCCTG
 CCCTACAGCCCCATGTTCTCAGGCTGTTTTATGCGTACCCACCGAGGTGCTGAAACCTGTGAGCCAG
 CACCTAGGACTTCTTCCGGCCTTAAAGACAGGGTGTGTTGGGACCCTGGTAAAGAAGAAGGTC
 CGACAACCAAAGAGTCCCATCTGGTGTGGGGTGGGGATGCCAACCCCTCTGCATTCCATAAAGGCAG
 CACAAGAAAAAGAAGTTTCTACCCCAAACCCAAAGCCTGCTGGGTCTCCCATGGCCAAGTCCCTACT
 GAGAGGCTGGAGCCCCATCCCTCATCCAGTAGCCAGGTCTTGGCAGTAAGCGCGGCTTGAAGAAG
 AGGGATTGCTCATGGTGGCAAGAACTGAGGGCAGTGTCTCCCTTTCTGAAGGAGGTGGATTCCAAGGA
 GACTGGGGGAAGCCTGCAGCCCTGGCTTGGCTGTATCTGTCTACTGGGCCAACCCCGGGGCCACT
 CCTCCAGAGGCCACAGGGGCACCATGCTGCGGTGCTCTAACTTACCCGGTAGCGCAGACCCTCTGA
 AGGGCCAGGCCTACTCCCTTACAGCCCTGGTATCCCTGCTTCCAGCCACCTTCTGGCTACAAC
 AGGCTCTCACCTATGGCTGCCAGCCTGATGCATTTCCCTCCACGCCCTATGACGCTGCTCTACGCAAC
 AGACTGGTCCAGCTTCGTCTGCTGGCACATGCCACCCGTACAACCTATGCGGCACCTCACTTCTTCC
 ACCTAACACCAAACCTG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG216827 representing NM_001172206
 Red=Cloning site Green=Tags(s)

MAPPKGNTEQSEEGDLPQLPVSPKPDDEQSRSSPTQLQDSPEAGGEQEEEQAFVLSLYKFMKERHTPI
 ERVPHLGFKQINLWKIYKAVEKLGAYELVTGRRWLKNVYDELGGSPGSTSAATCTRRHYERLVLPYVRHL
 KGEDDKPLPPTKPRKQYKMAKELRGDDGTEKLLKAKDSEERRVEQTTPGKTKSDATGQTQLPCQSSRD
 STEQLGPVSGSPPLTGASSCPEAYKRLLSSFYCKGAHGIMSPLAKKLLAQVSKAEALQCQEEGCRHGA
 RSPNKDIQDSPQNLRGAENSEHQLTPREGLQAPGGSTRMEAQVGPCPTAPMFSGCFHAYPTEVLKPVSQ
 HPRDFFSGLKDRVLLGPPGKEEGPTTKESHLVWGGDANHPSAFHKGSTRKRSFYPKKACWVSPMAKVPT
 ERPGAPSPHPSSPGLGSKRGLLEEEGF AHGGKLRVSPFLKEVDSKETGGKPAAPGLAVSCLLGPTPGPT
 PPEAYRGTMLRCPNFTGSADPLKQASLPF SPLVIPAFPAHLLATTGSSPMAASLMHFPPTPYDAVLRN
 RLGPASSAWHMPPVTTYAAPHFHLNTKL

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001172206

ORF Size: 1767 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_001172206.1](#), [NP_001165677.1](#)

RefSeq Size: 5696 bp

RefSeq ORF: 1770 bp

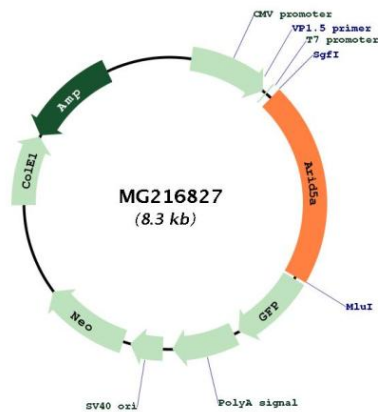
Locus ID: 214855

UniProt ID: [Q3U108](#)

Cytogenetics: 1 B

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 MG216827