

Product datasheet for **MG218289**

Arid5a (NM_145996) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Arid5a (NM_145996) 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:

>MG218289 representing NM_145996
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCAGCACCTCCGGCCAAAGGGAACACAGAGCAGTCAGAAGAAGGTGACCTCCCGCAGCTTCTGTAT
 CCCCCAAGCCAGATGATGAGCAGAGCAGGAGCCAGAGCCCCACCCAGCTCCAGGTGACAGGCCGCCGCT
 CTGGAAGAACGTGTATGATGAACTTGGCGGTAGCCCAGGCAGCACCAGTGCAGGCCACATGCACACGCCGC
 CACTATGAGAGGCTGGTCTCCCATATGTGCGGCATCTGAAGGGGAGGACGACAAGCCACTGCCTCCTA
 CCAAGCCAGGAAGCAATACAAGATGGCCAAGGAGCTGAGGGGAGACGATGGGACCCTGAGAAGCTGAA
 GAAGGCCAAGGACTCAGAGGAGAGGCGGGTGGAGCAGACCAGCCAGGAAAGACCAATCAGATGCCACT
 GGCCAGACACAGCTTCCCTGCCAGGGATCCTCGAGGGACAGCACAGAACAGCTGGGCCAGTATCTGGAC
 CCTCTCCACCCTCACGGGTGCTAGTAGCTGCCCTGAGGCCTACAAGCGGCTCTTGTCAAGCTTTTACTG
 CAAAGGGGCGCATGGCATCATGTCAACTGGCCAAAAAGAACTCCTGGCCAGGTGAGCAAGGCAGAG
 GCCTTGACAGTCCAAGAAGAGGGCTGTCGCCATGGAGCAAGGAGCCCAACAAGGACATCAAGACAGTC
 CCCAGAACCTAAGAGGGCCGGCTGAGAACTCTGAACACCAGCTAACCCCCGGGAAGGATTGACAGCCCC
 TGGTGGGAGCACCAGGATGGAGGCCAAGTGGGCCCTGCCCTACAGCCCCATGTTCTCAGGCTGTTTT
 CATGCGTACCCCACCGAGGTGCTGAAACCTGTCAGCCAGCACCCTAGGGACTTCTTCTCCGGCCTTAAAG
 ACAGGGTGTCTGTTGGGACCACCTGGTAAAGAAGAAGGTCCGACAACCAAGAGTCCCATCTGGTGTGGGG
 TGGGGATGCCAACCCCTCTGCATCCATAAAGGCAGCACAAAGAAAAGAAGTTTCTACCCCAAAACC
 AAAGCCTGCTGGGTGCTCCCATGGCCAAGTCCCTACTGAGAGGCTTGAGCCCATCCCTCATCCCA
 GTAGCCCAGGTCTTGGCAGTAAGCGCGGCTTGAAGAAGAGGGATTTCGCTCATGGTGGCAAGAACTGAG
 GGCAGTGTCTCCCTTTCTGAAGGAGGTGGATTCCAAGGAGACTGGGGGCAAGCCTGCAGCCCTGGCTTG
 GCTGTATCCTGTCTACTGGGCCAACCCGGGGCCACTCCTCCAGAGGCTACAGGGGCACCATGCTGC
 GGTGCTCTCTAAACTTACCAGGAGCAGACCCTCTGAAGGGCCAGGCCTCACTCCCTTACAGCCCCCT
 GGTGATCCCTGCTTCCAGCCACCTTCTGGCTACAACAGGCTCCTCACCTATGGCTGCCAGCCTGATG
 CATTTCCTCCACGCCCTATGACGCTGTCTACGCAACAGACTGGGTCCAGTTCGCTGCTGCCAGCACA
 TGCCACCCGTACAACCTATGCGGCACCTCACTTCTCCACTCAACACCAAACCTG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG218289 representing NM_145996
 Red=Cloning site Green=Tags(s)

MAAPPKGNTEQSEEDLPQLPVSPKPDDEQSRQSPTQLQVTGRRLWKNVYDELGGSPGSTSAATCTRR
 HYERLVLPYVRHLKGEDDKPLPPTKPRKQYKMAKELRGDDGTEKLLKAKDSEERRVEQTPGKTKSDAT
 GQTQLPCQGSRRDSTEQLGPVSGPSPPLTGASSCPEAYKRLLSSFYCKGAHGIMSPLAKKKLLAQVSKAE
 ALQCQEEGCRHGARSFNKDIQDSPQNLRGAENSEHQLTPREGLQAPGGSTRMEAQVGPCTAPMFSGCF
 HAYPTEVLKPVSQHPRDFFSGLKDRVLLGPPGKEEGPTTKESHLVWGGDANHPSAFHKGSTRKRFSYPKP
 KACWVSPMAKVPTERPGAPSPHPSSPLGSKRGLSEEGFAHGKLLRAVSPFLKEVDSKETGGKPAAPGL
 AVSCLLGPTPGTPPEAYRGTMLRCPLNFTGSADPLKQASLPFSPLVIPAFPAHLLATTGSSPMAASLM
 HFPTPYDAVLRNRLGPASSAWHMPPVTTAAPHFFHLNTKL

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_145996

ORF Size: 1596 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_145996.4](#), [NP_666108.2](#)

RefSeq Size: 5525 bp

RefSeq ORF: 1599 bp

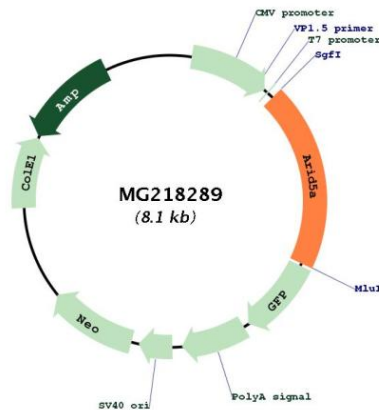
Locus ID: 214855

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 MG218289