OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MG219216

Arid5a (NM_001172205) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Arid5a (NM_001172205) 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:

>MG219216 representing NM_001172205
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCAGCACCTCCGGCCAAAGGGAACACAGAGCAGTCAGAAGAAGGTGACCTCCCGCAGCTTCCTGTAT
CCCCCAAGCCAGATGATGAGCAGAGCAGGAGCCAGAGCCCCACCCAGCTCCAGGACTCCCCTGAGGCAGG
TGGGGAGCAGGAGGAGGAACAGGCCTTCCTGGTCAGCCTCTACAAGTTCATGAAGGAGCGACACACGCCC
ATCGAGAGGGTGCCCCATCTTGGCTTCAAGCAGATTAACCTGTGGAAGATCTACAAGGCAGTGGAGAAGC
TGGGGGCCTATGAGCTGGTGACAGGCCGCCGCCTCTGGAAGAACGTGTATGATGAACTTGGCGGTAGCCC
AGGCAGCACCAGTGCGGCCACATGCACACGCCGCCACTATGAGAGGCTGGTCCTCCCATATGTGCGGCAT
CTGAAGGGGGAGGACGACAAGCCACTGCCTCCTACCAAGCCCAGGAAGCAATACAAGATGGCCAAGGAGC
TGAGGGGAGACGATGGGACCACTGAGAAGCTGAAGAAGGCCAAGGACTCAGAGGAGAGGCGGGTGGAGCA
GACCACGCCAGGAAAGACCAAATCAGATGCCACTGGCCAGACACAGCTTCCCTGCCAGGGATCCTCGAGG
GACAGCACAGAACAGCTGGGCCCAGTATCTGGACCCTCTCCACCACTCACGGGTGCTAGTAGCTGCCCTG
AGGCCTACAAGCGGCTCTTGTCAAGCTTTTACTGCAAAGGGGCGCATGGCATCATGTCACCACTGGCCAA
AAAGAAACTCCTGGCCCAGGTCAGCAAGGCAGAGGCCTTGCAGTGCCAAGAAGAGGGCTGTCGCCATGGA
GCAAGGAGCCCCAACAAGGACATTCAAGACAGTCCCCAGAACCTAAGAGGGCCGGCTGAGAACTCTGAAC
ACCAGCTAACCCCCCGGGAAGGATTGCAGGCCCCTGGTGGGAGCACCAGGATGGAGGCCCAAGTGGGCCC
CTGCCCTACAGCCCCCATGTTCTCAGGCTGTTTTCATGCGTACCCCACCGAGGTGCTGAAACCTGTCAGC
CAGCACCCTAGGGACTTCTTCTCCGGCCTTAAAGACAGGGTGCTGTTGGGACCACCTGGTAAAGAAGAAG
GTCCGACAACCAAAGAGTCCCATCTGGTGTGGGGTGGGGATGCCAACCACCCCTCTGCATTCCATAAAGG
CAGCACAAGAAAAAGAAGTTTCTACCCCAAACCCAAAGCCTGCTGGGTGTCTCCCATGGCCAAGGTCCCT
ACTGAGAGGCCTGGAGCCCCATCCCCTCATCCCAGTAGCCCAGGTCTTGGCAGTAAGCGCGGCTTGGAAG
AAGAGGGATTCGCTCATGGTGGCAAGAAACTGAGGGCAGTGTCTCCCTTTCTGAAGGAGGTGGATTCCAA
GGAGACTGGGGGCAAGCCTGCAGCCCCTGGCTTGGCTGTATCCTGTCTACTGGGCCCAACCCCGGGGCCC
ACTCCTCCAGAGGCCTACAGGGGCACCATGCTGCGGTGTCCTCTAAACTTCACCGGTAGCGCAGACCCTC
TGAAGGGCCAGGCCTCACTCCCCTTCAGCCCCCTGGTCATCCCTGCTTTCCCAGCCCACCTTCTGGCTAC
AACAGGCTCCTCACCTATGGCTGCCAGCCTGATGCATTTCCCTCCCACGCCCTATGACGCTGTCCTACGC
AACAGACTGGGTCCAGCTTCGTCTGCCTGGCACATGCCACCCGTCACAACCTATGCGGCACCTCACTTCT
TCCACCTCAACACCAAACTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

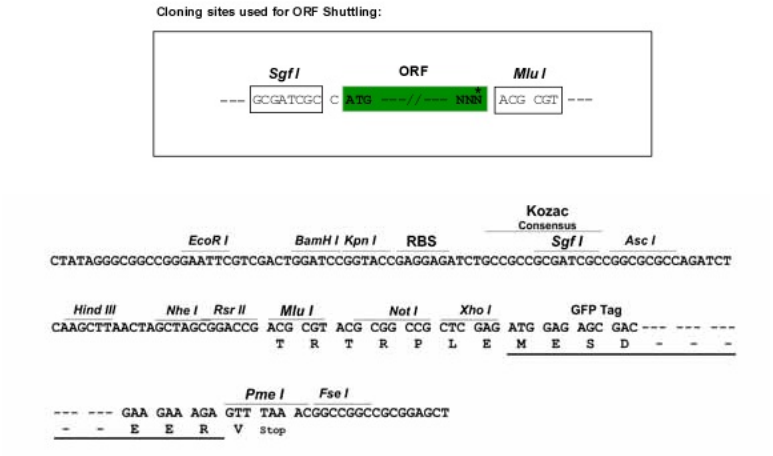
>MG219216 representing NM_001172205
Red=Cloning site Green=Tags(s)

MAAPPAKGNTEQSEEGDLPQLPVSPKPDDEQSRSQSPTQLQDSPEAGGEQEEEQAFLVSLYKFMKERHTP
IERVPHLGFKQINLWKIYKAVEKLGAYELVTGRRLWKNVYDELGGSPGSTSAATCTRRHYERLVLPYVRH
LKGEDDKPLPPTKPRKQYKMAKELRGDDGTTEKLKKAKDSEERRVEQTTPGKTKSDATGQTQLPCQGSSR
DSTEQLGPVSGPSPPLTGASSCPEAYKRLLSSFYCKGAHGIMSPLAKKKLLAQVSKAEALQCQEEGCRHG
ARSPNKDIQDSPQNLRGPAENSEHQLTPREGLQAPGGSTRMEAQVGPCPTAPMFSGCFHAYPTEVLKPVS
QHPRDFFSGLKDRVLLGPPGKEEGPTTKESHLVWGGDANHPSAFHKGSTRKRSFYPKPKACWVSPMAKVP
TERPGAPSPHPSSPGLGSKRGLEEEGFAHGGKKLRAVSPFLKEVDSKETGGKPAAPGLAVSCLLGPTPGP
TPPEAYRGTMLRCPLNFTGSADPLKGQASLPFSPLVIPAFPAHLLATTGSSPMAASLMHFPPTPYDAVLR
NRLGPASSAWHMPPVTTYAAPHFFHLNTKL

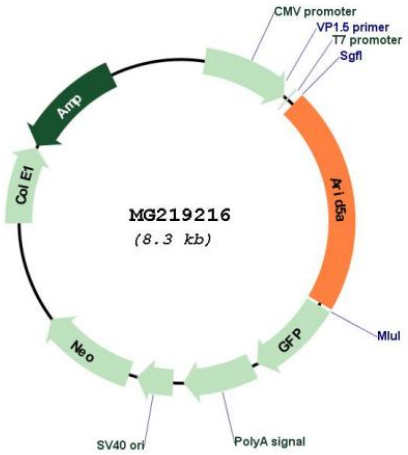
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



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).

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_001172205.1, NP_001165676.1

RefSeq Size: 5699 bp

RefSeq ORF: 1773 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 differention (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]