

Product datasheet for **MC224098**

Arid4a (NM_001081195) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Arid4a (NM_001081195) Mouse Untagged Clone
Tag: Tag Free
Symbol: Arid4a
Synonyms: A630009N03; A630067N03Rik; MmRBBP1; Rbbp1
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC224098 representing NM_001081195
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGAAGGGCGCAGATGAGCCTGCCTACCTGACAGTGGAACTGATGTCAGTGCCAAGTACCGAGGGGCT
TCTGTGAGGCAAAGATCAAGACTGTGAAAAGGCTGGTAAAAGTCAAGGTACTTCTGAAGCAGGATAACAC
AACACAGTTGGTCAAGATGACCAAGTAAAGGGCCCTTTAAGAGTTGGAGCTATTGTAGAAACAAGGACA
TCTGATGGATCTATCCAGGAAGCTATTATCAGCAAATTGACAGATGCTAGTTGGTATACTGTGGTGTGG
ATGACGGTGATGAGAGAACTCTGAGGCGGACCTCACTTTGCCTGAAAGGGGAGAGACATTTTGCCGAGAG
TGAGACTCTGGATCAGCTTCTCTAACAAACCCAGAGCATTGTTGGGACGCCAGTCATTGCAAAGAAGACC
AACAGAGGGAGGAGGTCCTCACTGCCTATCACTGAAGACGAAAAGGAAGAAGAAAGCAGCGAAGAGGAAG
ATGAAGATAAGAGGCGTCTCAATGACGAATTATTAGGAAAAGTTGTAAGTGTGGCCTCCACAGCAGAGAG
CACTGGATGGTACCCTGCTTTGGTTGTCTCTCCAGCTGCAATGATGACGTCACAGTGAAAAAAGATCAG
TGTTTAGTTCGATCATTTATTGATTCTAAATTTATTCTATAGCAAGAAAGGACATTAAGGAACTGGACA
TTCTCACTTACCAGAATCTGAGCTCTGTGCTAGGCCAGGCTGCGAAGAGCAAGTGTCTTCTAAAAGG
TAGGATTGTTCTGATAATTGAAAAATGGATATAAGTGAATCCTTGAGTCTCCAGCAGTGATGACGAA
GAATGCCCAGCTGAGGAACATGAAGAGGAGAAGGAAAAAGAGGCCAAAAAGGAGGAAGAAGAGCTGCCTG
AGGAAGAGCTTGATCCTGAGGAGAGGACAATTTCTCCAACAGCTTTATAAGTTTATGGAAGACAGAGG
TACTCCGATCAACAAACCCACTGTTTTGGGCTATAAAGATCTCAATCTCTTCAAACCTTTAGACTGGTC
TATCATCAGGGGGATGTGGCAATATTGACAGTGGTGTGTATGGAAGCAAATTTATATGGACCTTGGCA
TTCCAATTTGAATTCAGCTGCTTCTACAATGTAATAACTGCTTATAGAAAATATCTCTATGGTTTTGA
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AAGAGGGAGAAGGAAAATTTGTCGAGATGCAAACCTGTATCAAGAAGGAAATAGAGGAAGGAAAAATCGAA
GACAAATTCCTCCGAGATGATTTAGAAAATAAGGACGCAGGTGATGACGATGACGATGGCGACCCAGCAG



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CGAAGAGAGAGCATGAGCTGCTGTTCCGGGAGGAAGAGCACACCAAGAACAAGAGAAGAAGATTA
 GCCAGAGGACTCTGAGAGAGACTCAGATGAAGAGGAAGAGAAGAGCCAAGAGAGGGAAGAGACTGAGAGC
 CGGTGTGACTCGGAAGGGGAGGACGAGGAGGACGACACAGAGCCCTGCCTGACGGGAACCAAGTGAAGG
 TCAAGTACGGACGAGGAAAACTCAGAAAAATTTATGAAGCCAGCATCAAAAGCACGGAGATGGACGACGG
 GGAGATTCTGTACCTAGTGCACACTACGGATGGAACGTCAGATATGATGAATGGTAAAAGCTGACAGG
 ATAATCTGGCCCTTGACAAAAGTGGACCAAGAAAAAACAAGAAAGAAAGTAAAGAATAAAGAAGATA
 GTGAAAAGGACGAAAAGAGGGATGAAGAGAGGCGAAGTCCAAACGGGGAAGACCCTTTAAAATCTAC
 TTTTCGCCAAACATGCCATACAGTTTATCTAAGACGTCAAACAGTGAAGGAAAAATCAGACTCCTGTTCA
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 AAGAATTGGAAAAAATGAAAATGCACATGATGATAAACTAGATGAAGAAAAACCAAGATTGTACATAT
 ATCAAAAGAAAACGACAGGACTCAGGCACAGCCCTCAGACACCCTGACGGTGGAGGCAGGGGACAGCGAT
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 CCAAAGGGAAGGGAAGGCGCAGCAAGACAAAAGACCTTTCGTTAGAACTTATAAAGATTTACCTTTCCG
 CCAGGAGGAAGCAGGCAGCGAAGCTCATGGGACGTTTATAGCCTGGAGTTTTCTTACTAGAATGTAAA
 AACTTTTCTTCTACTGAAGATGACATCGACCCATATGAGAAAGAAAAAAGTTGAAACGAAAAATCCTGG
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 GAGGTCTGACGATGGCGCGGGAGCCGAGGGCATGAAAGGCGCACAGTGGAACAGCACTTTGAAACAGAA
 GGTGAAGGGATGCCATCGCTGACAGCCGAGCCGACCAGGGCCTTCAAGAACTGACTAGTGAGAAATCGG
 ACAGTCCAGCCGAAGAAGAACCGGTGCACACGCCACTCAAGAAGAGGAGGATGCGATGCCTCTGATCGG
 GCCTGAAACCTTGGTTTGCATGAGGTAGACCTGGATGATTTAGATGAGAAGGATAAGACCAGTATTGAG
 GATGTGGTAGTAGAAGGCTCTGAGTCTAACTCTCTGGCTCCGTACCCTGCCTTACCTCCTGTAGCAC
 AGCATAACTTTCCGTAGCTTCCCCTCACTCTCAGCCAAGACGAGTCCCGAAGTATAAAGAGTGAGAG
 TGACATTACAATTGAAGTTGATAGCATCGCCGAAGAATCACAAGAAGGCCTCTGTGAGAGGGAATCGGCG
 AACGGGTTTGAAGCCAGTGTTCCTCTGGTGCCTGTAGTATAATTGCACACGAGCGAGAGAGCAGAGAGA
 AGGGTCAGAAAAGGCCAAGCGATGGAAATAGTGGATTAATTGCAAAAAAGCAAAAGCGAACCCCAAGCG
 GACAAGTGCTGCAGCCAAAAGTAAAAGAACGGAGCAGGACAGAGCAGTACAGCGAGGACCTCCCCGCC
 ATGGACAGCTCCAGTAACTGCACCCAGTGAAGCGCCTTACCCTGCCAAGTACAGAAAGTCCACGGT
 CTCCTGCAAGAACCTCGCCTCACATCAAAGATGCAGAGAAGGAGAAGCACCGAGAGAAGCATCCGAACTC
 CTCCTCCAGGACATACAAGTGGAGCTTCCAGCTCAATGAATTAGATAATATGAACAGTACAGAGAGAATC
 TCTTTTCTCAAGAAAACTACAGGAAATCAGAAAATACTACATGTCTTTGAAGTCTGAAGTTGCAACCA
 TCGACAGAAGGAGAAAAGATTGAAAAAGAAAGACAGAGAAGTGTCTCACGCAGGAGCGTCAATGTCTCTC
 TGCTTCATCAGACACTGGAATGAGCCCTTCTTCATCGTCTCCCCCAAAATGTACTTGCTGAGAGTGC
 AGGTGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** Sgfl-MluI
- ACCN:** NM_001081195
- Insert Size:** 3786 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- 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_001081195.1](#), [NP_001074664.1](#)

RefSeq Size: 5780 bp

RefSeq ORF: 3786 bp

Locus ID: 238247

UniProt ID: [F8VPQ2](#)

Cytogenetics: 12 C2

Gene Summary: DNA-binding protein which modulates activity of several transcription factors including RB1 (retinoblastoma-associated protein) and AR (androgen receptor) (PubMed:17043311, PubMed:23487765). May function as part of an mSin3A repressor complex (By similarity). Has no intrinsic transcriptional activity (PubMed:23487765). Plays a role in the regulation of epigenetic modifications at the PWS/AS imprinting center near the SNRPN promoter, where it might function as part of a complex with RB1 and ARID4B (PubMed:17043311). Involved in spermatogenesis, together with ARID4B, where it acts as a transcriptional coactivator for AR and enhances expression of genes required for sperm maturation (PubMed:23487765). Regulates expression of the tight junction protein CLDN3 in the testis, which is important for integrity of the blood-testis barrier (PubMed:23487765). Plays a role in myeloid homeostasis where it regulates the histone methylation state of bone marrow cells and expression of various genes involved in hematopoiesis (PubMed:18728284). May function as a leukemia suppressor (PubMed:18728284).[UniProtKB/Swiss-Prot Function]