

Product datasheet for **MC224223**

Arid4b (NM_194262) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Arid4b (NM_194262) Mouse Untagged Clone
Tag: Tag Free
Symbol: Arid4b
Synonyms: BCAA; BRCAA1; RBBP1L1; Rbp1l1; SAP180
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC224223 representing NM_194262
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAAGGCCCTTGATGAACCTCCTTATTTGACAGTGGGCACTGATGTGAGTGCCAAATACAGAGGAGCCT
 TCTGTGAAGCCAAGATCAAGACTGCAAAAAGACTTGTCAAAGTCAAGGTGACTTTTAGACACGATTCTTC
 AACAGTGAAGTTCAGGATGACCACATAAAGGGCCCACTGAAGGTAGGAGCTATTGTGGAAGTGAAGAAT
 CTTGATGGTGCCTATCAGGAAGCGTTATCAATAAACTGACAGATGCAAGTTGGTATACTGTGGTTTTTG
 ATGATGGAGATGAGAAGACACTGAGAAGATCTTCATTATGTCTGAAAGGAGAGACATTTTGTGAAAG
 TGAACACTAGACCAGCTCCCACTACCAATCCTGAGCATTGCGCACTCCAGTCATAGGAAAGAAAACA
 AATAGAGGAAGAAGATCTAACCATATACCAGAGGAGGAGTCTTCCTCCTCATCCAGTGTGACGATGAGG
 AGGAGAGGAAACAGACTGATGAGCTACTAGGCAAAGTTGTTTGTGTAGATTATGTTAGCTTGAGAAAA
 GAAAGCGATGTGGTTTCTGCACTGGTGGTTTGTCTGACTGTAGTGTGAGATTGCTGTGAAAAAAGAC
 AATATCTTGTTCGGTCTTTCAAAGATGGCAAATTTACTTCAGTTCCAAGAAAAGATGCCATGAAATTA
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 AAGTAGAGCTATTCCTGCTAATTGGAAGACTGAATTGAAAGAAGACAGCTCCAGTAGTGAAGCTGAGGAG
 GAGGAGGAGGAGGAAGATGATGAAAAAGAGAAAAGATAACAGCAGCGAAGAAGAGGAAGAAATAGAAC
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 GGAGGTTTATAATATTGAAAGTGGAGCTGTTTGAAGCAAGTCTATCAAGACCTTGGGATCCCTGTCT
 TAAATTCAGTGCAGGATACAATGTTAAATGTGCTTATAAAAAGTACTTATATGGCTTTGAGGAGTACTG
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 TCTGGGAAGTAAAAAAGCTTATTAGAATGTATACCTGCACAATCTGATGAAGAAAAAGAAGCTCACATT
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GCACAGGGTAGATGGTGAAGAAGCAAGCAGATCTGGAGATGAAACCAATAAAGAAGAAGATGAAGA
 TGATGAAGAAATAGAAGAGGAGGAGGAAGAAGACGAGGAAGAAGACGAGGATGAAGATGATGATGACAAC
 AATGAAGAAGAGGAGTTTGTGCTATCCACCAGGCATGAAAGTCCAAGTGCAGTATGGACGAGGAAAA
 ATCAAAAAATGTATGAAGCTAGTATAAAGATTCTGATGTGCAAGGTGGAGAGGCCCTTTACTTGGTGCA
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 AGGGACAGTGGCCTAAGAAAACGCTAAAGGAGCTTTTCTGACTCGGACACTGAGGCTGCAGCTTCTCC
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 TCACCCATTATGGAGCTAGAAAAGCCACTACCTGCCAGTGTGACAATAAGCCCATTGAAGAAAAACCC
 TAGAAGTTAGTGATAGGAAAACAGAATTTCCGAGCAGTGGCAGTAATTCAGTGTCAATACCCACCTAC
 CACACCAGAGTCGCCTTCTTCAGTCACTATAACAGAAGCTAGTCAGCAGCAGTCTTCTGTACAGTGTCA
 GTGCCCTGCCTCAAACCAGGAAGAGGTTTCAAGCATTAAAGAGTGAAGTGAAGTGAAGTGAAGTGAAGTGA
 ACAGTGTGTGGGGAGCTCCAGGACCTCCAGTCCGAGGGGAATAGCTCACAGCAGGCTTTGATGCGAG
 CGTGAGTTCAGCAGTAGCAATCAGCCAGAACCAGATAACCCAGAAAAAGCCTGTACAGGTGAGAAAAGA
 GTGAAAGATACTCAGGGAGTAGGAAGTTCATCAAAAAAGCAGAAGAGAAGCCATAAAGCCACCGTGGTGA
 ACAACAAAAGAAAGGGAAAAGGCACAACAGTAGTGACAGTGAAGAACTCTCAGTGGTGAAGTGTGAC
 TAAGACTCAGACAATCAAGTCAAGTCCCCACCGAATGAAGACCCACAACAGCAAGTCTCCAGCAAGGTA
 CAGTCTCCAGGAAAAGGTGGCAGGAATGGGATAAAGACCCTGATCTCAAGGAGCCTAGTAACCGGCTTC
 CCAAGGTTTACAAGTGGAGTTTTAGAGCTCGGACCTGGAAAATATGACAAGTGTGAACGTATCTCAAT
 TCTTCAAGAAAAATTGCAAGAAATCAGAAAGCATTATCTGTCTTTAAATCTGAAGTAGCTTCCATTGAT
 AGGAGGAGAAAACGTTTAAAGAAGAAAGAGAGAGAAAGTGTGCTACATCTTCTTCTCCTCTTCTCCCT
 CGTCCAGCTCCATCACAGCTGCTGTATGTTGACACTAGCTGAACCATCAATGTCCAGTGCATCACAGAA
 TGGAATGTCAGTTGAGTGCAGGTGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM_194262
- Insert Size:** 3945 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_194262.2](#), [NP_919238.1](#)

RefSeq Size: 6113 bp

RefSeq ORF: 3945 bp

Locus ID: 94246

UniProt ID: [A2CG63](#)

Cytogenetics: 13 5.29 cM

Gene Summary: Acts as a transcriptional repressor. May function in the assembly and/or enzymatic activity of the Sin3A corepressor complex or in mediating interactions between the complex and other regulatory complexes (By similarity). 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 ARID4A (PubMed:17043311). Involved in spermatogenesis, together with ARID4A, where it functions as a transcriptional coactivator for AR (androgen receptor) and enhances expression of genes required for sperm maturation. 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. May function as a leukemia suppressor (PubMed:18728284).
[UniProtKB/Swiss-Prot Function]
Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1).