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Product datasheet for MC223891

Arid5b (NM_023598) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Arid5b (NM_023598) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Arid5b
Synonyms:	4930580B11; 5430435G07Rik; AI467247; Desrt; Mrf2; Mrf2alpha; Mrf2beta
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

Fully Sequenced ORF:

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>MC223891 representing NM_023598
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGCCCAACTCACTCCAGTGGGTCGGCTCACCGTGTGGCTTGCACGGACCTTATATTTTTTATAAGG
CTTTTCAATTCCACCTTGAAGGCAAACCAAGAATCTTGTCCCTTGGCGACTTTTTCTTTGTAAGATGTAC
GCCAAAGGATCCGATTTGCATAGCGGAGCTCCAGCTGTTGTGGGAAGAAAGGACCAGCCGGCAACTTTTA
TCCAGCTCGAAACTTTATTTCCTCCCCGAAGACACTCCCCAGGGCAGAAATAGCGACCATGGCGAGGATG
AGGTCATCGCTGTCTCTGAAAAGGTGATTGTTAAATTAGAGGACCTTGTCAAATGGGCGCATTCTGATTT
CTCCAAGTGGAGGTGTGGGCTCCGAGCCACTCCAGTGAAAACTGAGGCCTTCGGGAGAAACGGACAGAAG
GAGGCTCTGCTCAGGTACAGGCAGTCAACCCTCAACAGTGGGCTCAACTTCAAAGACGTTCTCAAGGAAA
AAGCTGATCTCGGGGAAGATGAGGAAGAAACCAACGTGATTGTGCTCAGTTACCCCCAGTACTGTCGGTA
CCGGTCCATGCTTAAACGGATCCAGGATAAGCCATCGTCCATCCTCACGGACCAGTTCGCATTAGCCCTG
GGGGGCATCGCAGTGGTCAGCAGAAACCCCCAGATCCTGTACTGCCGGGATACCTTTGATCACCCCACTC
TGATAGAAAACGAGAGTGTGTGTGATGAGTTCGCGCCAAATCTTAAAGGCAGACCACGCAAAAAGAAAAC
ATGTCCCCAGAGAAGAGATTCCTTCAGTGGCTCAAAGGACCCCAACAATAACTGTGACGGTAAAGTTATC
AGCAAGGTGAAAGGAGAGGCCAGGTCAGCCTTGACCAAGCCGAAGAATAACCACAATAACTGTAAAAAAA
CCTCAAATGAAGAAAAGCCAAAGCTGTCTATTGGCGAAGAATGCAGGGCAGATGAACAAGCCTTCTTAGT
GGCCCTGTATAAATACATGAAAGAAAGAAAAACGCCCATCGAGCGAATTCCCTACTTGGGTTTCAAACAG
ATTAACCTTTGGACTATGTTTCAAGCTGCTCAAAAACTGGGAGGATATGAAACAATAACAGCCCGCCGTC
AGTGGAAACATATTTATGACGAGTTAGGTGGTAATCCTGGGAGCACCAGTGCGGCCACCTGTACTCGCAG
ACACTACGAAAGGTTAATCCTGCCATACGAAAGATTTATTAAGGGAGAAGAAGATAAGCCTCTGCCGCCA
ATCAAACCTCGGAAACAGGAAAACAATACACAGGAAAATGAGAATAAAACAAAAGTCTCGGGAAACAAAC
GTATCAAACAGGAAATGGCCAAAAACAAGAAAGAAAAAGAGAACACCCCCAAACCCCAAGATACATCTGA
GGTTTCATCAGAGCAAAGGAAGGAAGAAGAGACGTTAAACCACAAAAGCGCCCCCGAGCCTCTCCCTGCT
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CCTGAAGTAAAGGGGAAACCAGAAGGGCACAAGGATCTTGGAGCGAGGGCCCCAGTGTCCAGAGCAGACC
CAGAAAAGGCCAATGAAACTGACCAAGGTTCCAACAGCGAGAAAGAGGCCGAGGAGATGGGAGATAAGGG
CCTTGCCCCTCTGCTTCCAAGCCCTCCCTTGCCTCCTGAAAAAGATTCAGCTCCCACCCCTGGGGCTGGC
AAACAGCCCCTTGCCTCTCCCAGCACCCAGATGGACTCAAAGCAAGAAGCCAAACCCTGCTGCTTTACAG
AGAGCCCTGAGAAGGACCTCCAAGGAGCACCCTTCTCCAGCTTCTCTGCCACCAAGCCACCACTGACAAG
CCAGAACGAGGCAGAGGAAGAGCAGCTTCCTGCCACGGCCAACTACATTGCCAACTGCACTGTGAAGGTG
GACCAGCTGGGCAGTGACGACATCCACACTGCTCTCAAGCAGACCCCGAAGGTCCTTGTGGTCCAATCAT
TTGACATGTTCAAAGACAAAGACTTGACCGGCCCCATGAATGAGAACCACGGACTTAACTACACGCCCCT
GCTTTACTCCCGGGGCAACCCTGGTATCATGTCCCCATTGGCTAAGAAAAAGCTTTTGTCTCAGGTGAGT
GGGGCCAGCCTCTCCAGCAGCTATCCCTATGGCTCCCCGCCCCCTTTGATCAGCAAAAAGAAACTCATTG
CCAGGGAAGACCTGTGCTCGGGTTTGTCCCAGGGCCACCACAGCCAAAGCTCTGACCACACGGCCGTCAG
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GACATCTTCAAGCACGACAAACTGAGCCGGTCCGATGCTCATCGATGTGGCTTCTCCAAGCACCAGCTCG
GCTCCCTGGCAGACTCCTACATCCTCAAACAAGAGACACAGGAGGGCAAAGATAAACTGTTAGAGAAGAG
AGCCGTCTCCCACGCCCATGTGCCCAGTTTCCTGGCCGACTTCTACTCATCCCCGCATCTCCATAGCCTC
TACCGGCACACAGAGCACCATCTTCACAACGAACAGTCCTCCAAGTATGCCGCTAGGGACGCGTACCAGG
AATCCGAAAACGGCGCCTTTCTTTCTCACAAGCACCCGGAGAAGATCCACGTCAATTATCTCGCATCTCT
CCACCTGCAAGATAAGAAGGTGGCAGCGGCAGAAGCCTCTACCGATGATCAACCCACAGATCTGAGCCTT
CCCAAGAACCCACATAAACTAACCAGCAAAGTCCTGGGCCTGGCCCACTCCACCTCGGGGTCCCAGGAGA
TCAAAGGCGCCTCCCAGTTCCAGGTCGTCAGCAACCAGAGTCGAGACTGTCATCCCAAAGCCTGCCGGGT
ATCGCCCATGACCATGTCGGGCCCTAAGAAATACCCTGAGTCACTTGCAAGGTCAGGAAAGCCTCACCAG
GTGAGACTGGAGAACTTCAGGAAAATGGAAGGCATGGTCCATCCCATCCTGCACCGGAAGATGAGCCCGC
AGAACATTGGAGCTGCGCGCCCCATAAAGCGCAGCCTGGAGGATTTAGATCTGGTGATCGCCGGGAAAAA
GGCCAGGGCTGTGTCTCCCTTGGACCCAGCCAAGGAGGCTTCTGGGAAAGAAAAGGCCTCCGAACAGGAG
AGCGAGGGCAACAAAGGCGCCTACGGTGGGCATTCTGGGGCTGCCTCAGAAGGGCACAAGCTCCCTCTCT
CCACCCCTATCTTCCCGGGTTTGTATTCTGGGAGCCTGTGTAATTCAGGCCTCAACTCCAGGCTCCCGGC
CGGGTACTCCCATTCTCTGCAGTACTTGAAGAACCAGACGGTGCTTTCTCCTCTCATGCAACCCCTGGCT
TTCCACTCGCTCGTGATGCAGAGAGGAATTTTTACATCGCCGACAAATTCTCAGCAGCTGTACAGACACT
TGGCCGCAGCCACCCCTGTAGGAAGTTCCTACGGGGACCTGTTGCACAACAGCATCTACCCATTAGCTGG
TATCAACCCTCAGGCTGCCTTCCCATCTTCTCAGCTGTCATCCGTACACCCCAGCACAAAACTGTAA

ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGA
TTACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-NotI

ACCN: NM_023598

Insert Size: 3567 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).

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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_023598.2, NP_076087.2
RefSeq Size:	4494 bp
RefSeq ORF:	3567 bp
Locus ID:	71371
UniProt ID:	Q8BM75
Cytogenetics:	10 B5.1- B5.2
Gene Summary:	Transcription coactivator that binds to the 5'-AATA[CT]-3' core sequence and plays a key role in adipogenesis and liver development. Acts by forming a complex with phosphorylated PHF2, which mediates demethylation at Lys-337, leading to target the PHF2-ARID5B complex to target promoters, where PHF2 mediates demethylation of dimethylated 'Lys-9' of histone H3 (H3K9me2), followed by transcription activation of target genes. The PHF2-ARID5B complex acts as a coactivator of HNF4A in liver (By similarity). Required for adipogenesis: regulates triglyceride metabolism in adipocytes by regulating expression of adipogenic genes. Overexpression leads to induction of smooth muscle marker genes, suggesting that it may also act as a regulator of smooth muscle cell differentiation and proliferation. [UniProtKB/Swiss-Prot Function]

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