

## Product datasheet for **RG218151**

### ARID1A (NM\_006015) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ARID1A (NM_006015) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ARID1A
Synonyms:	B120; BAF250; BAF250a; BM029; C1orf4; CSS2; ELD; hELD; hOSA1; MRD14; OSA1; P270; SMARCF1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG218151 representing NM_006015 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCGCGCAGGTCGCCCGCCGCGCCAGCAGCCTGGGCAACCCGCGCCGCGCCGCGCCCTCGGAGC  
TGAAGAAAGCCGAGCAGCAGCAGCGGGAGGAGCGGGGGCGAGGCGCGCGCGCGGCGAGCGCCGAGCG  
CGGGGAAATGAAGGCAGCCGCGGGCAGGAAAGCGAGGGCCCCGCGTGGGGCGCGCCGAGCCGCTGGGA  
AAGGAGCTGCAGGACGGGGCCGAGAGCAATGGGGTGGCGGCGCGGAGCCGGCAGCGCGCGGGC  
CCGGCGCGGAGCCGACCTGAAGAACTCGAACGGGAACCGGGCCCTAGGCCCGCCCTGAACAATAACCT  
CACGGAGCCGCCCGCGCGCGGTGGCGCAGCAGCGATGGGGTGGGGCGCCCTCTCACTCAGCCGCG  
GCCGCTTGCCGCCCCAGCCTACGGCTTCGGGAACCCCTACGGCCGGAGCCCGTCTGCCGTCGCCGCCG  
CCGCGGCCCGCTTCCACCAACAACATGGCGGACAACAAGCCCTGGCCTGGCAGCGCTGCAGAGCGG  
CGCGCGCGGGGCTGGAGCCCTACGCGGGGCCAGCAGAACTCTACGACCACGGCTTCCCAACCAC  
CAGTACAACCTACTACCCCAACCGCAGCGCCTACCCCGCCCGCCCGCCGCGCTACGCGCTGAGCTCCC  
CGAGAGGTGGCACTCCGGCTCCGGCGCGCGCGGCTGCCGGCTCCAAGCCGCTCCCTCCTCCAGCGC  
CTCCGCTCCTCGTCTTCTGCTCCTCGCTCAGCAGCGCTTCGGGGCCATGGGGGAGGGCGCCCTCC  
GCGGCCGCGGGGAACTCCCAGCCACCGCCACCCCAACCTCAACCAACTGCTCAGTCGCCAGCT  
CGCCCCGGGCTACCAGGGCTACCCCGGGGCGACTACAGTGGCGGGCCAGGACGGGGCGCCGGCAA  
GGCCCCGGGACATGGCTCGCAGTGTGGGGGCTGCGCGGGCAGCTGCGCGGGCGCGCCCTCG  
GGAGGGCCCAACAAGGAGCCACCACGCGCCATGAGCCCGGGAGCAGCGCGCGGGGGCAGCCGC  
TCGCCCGACCCCTCAGCCATCCAGTCCAATGGATCAGATGGGCAAGATGAGACCTCAGCCATATGGCGG  
GACTAACCATACTCGCAGCAACAGGGACCTCCGTGAGGACCGCAGCAAGGACATGGGTACCCAGGGCAG  
CCATACGGGTCCCAGACCCCGCAGCGGTACCCGATGACCATGCAGGGCGGGCGCAGAGTCCATGGGCG  
GCCTCTTTATACACAGCAGATTCTCTTATGGACAACAAGGCCCGCGGGTATGGTCAACAGGGCCA



GACTCCATATTACAACCAGCAAAGTCTCACCCCTCAGCAGCAGCAGCCACCCCTACTCCCAGCAACCACCG  
 TCCCAGACCCCTCATGCCAACCTTCGTATCAGCAGCAGCCACAGTCTCAACCACCACAGCTCCAGTCTCT  
 CTCAGCCTCCATACTCCCAGCAGCCATCCCAGCCTCCACATCAGCAGTCCCCGGCTCCATACCCCTCCCA  
 GCAGTCGACGACACAGCAGCAGCCCCAGAGCCAGCCCCCTACTCACAGCCACAGGCTCAGTCTCCTTAC  
 CAGCAGCAGCAACCTCAGCAGCCAGCACCTCGACGCTCTCCAGCAGGCTGCGTATCCTCAGCCCCAGT  
 CTCAGCAGTCCCAGCAAACCTGCCATTTCCAGCAGCGCTTCCCTCCACCCGAGGAGTATCTCAAGATTC  
 ATTTGGTCTCAGGCATCCTCAGCCCCCTCAATGACCTCCAGTAAGGGAGGGCAAGAAGATATGAACCTG  
 AGCCTTCAAGTCAAGACCCTCCAGCTTCCGCTGATCTATCTGGTTCAATAGATGACCTCCCCATGGGGACAG  
 AAGGAGCTCTGAGTCTGGAGTGAGCACATCAGGGATTTCCAGCAGCCAAGGAGAGCAGAGTAATCCAGC  
 TCAGTCTCCTTTCTCCTCATACTCCCTCACCTGCCTGGCATCCGAGGCCCTTCCCCGTCCCCTGTT  
 GGCTCTCCCGCCAGTGTGCTCAGTCTCGCTCAGGACCACTCTCGCTGCTGCAGTGCCAGGCAACCAGA  
 TGCCACCTCGGCCACCCAGTGGCCAGTCGGACAGCATCATGCATCCTTCCATGAACCAATCAAGCATTGC  
 CCAAGATCGAGGTTATATGCAGAGGAACCCCCAGATGCCCAAGTACAGTCCCCCAGCCCGGCTCAGCC  
 TTATCTCCGCTCAGCCTTCCGGAGGACAGATACACACAGGCATGGGCTCCTACCAGCAGAACTCCATGG  
 GGAGCTATGGTCCCAGGGGGTTCAGTATGGCCACAAGGTGGCTACCCAGGCAGCCAACTATAATGC  
 CTTGCCCAATGCCAACTACCCAGTGCAGGCATGGCTGGAGGCATAAACCCCATGGGTGCCGGAGGTCAA  
 ATGCATGGACAGCCTGGCATCCCACCTTATGGCACACTCCCTCCAGGGAGGATGAGTCACGCCTCCATGG  
 GCAACCGGCTTATGGCCCTAACATGGCCAATATGCCACCTCAGGTTGGGTGAGGATGTGTCCCCCACC  
 AGGGGGCATGAACCGGAAACCAAGAACTGCTGTGCCATGCATGTTGCTGCCAACTCTATCCAAAAC  
 AGGCCGCCAGGCTACCCCAATATGAATCAAGGGGGCATGATGGAACTGGACCTCCTTATGGACAAGGGA  
 TTAATAGTATGGTGGCATGATCAACCTCAGGGACCCCATATTCATGGGTGGAACCATGGCCAAACA  
 TTCTGCAGGGATGGCAGCCAGCCAGAGATGATGGCCTTGGGGATGTAAGTTAACTCCAGCCACCAAA  
 ATGACAACAAGGCAGATGGGACACCAAGACAGAAATCCAAATCCAAGAAATCCAGTTCTTCTACTACAA  
 CCAATGAGAAGATCACCAAGTTGTATGAGCTGGGTGAGCCTGAGAGGAAGATGTGGGTGGACCGTTA  
 TCTGGCCTTCACTGAGGAGAAGGCCATGGGCATGACAAATCTGCCTGCTGTGGTAGGAAACCTCTGGAC  
 CTCTATCGCCTCTATGTGTCTGTGAAGGAGATTGGTGGATTGACTCAGGTCAACAAGAACAAAAATGGC  
 GGGAACTTGAACCAACCTCAATGTGGGCACATCAAGCAGTGTGCCAGCTCCTTGAAAAAGCAGTATAT  
 CCAGTGTCTCTATGCCTTTGAATGCAAGATTGAACGGGGAGAAGACCCTCCCCAGACATCTTTCAGCT  
 GCTGATCCAAGAAGTCCCAGCCCAAGATCCAGCCTCCCTCTCCTGCGGGATCAGGATCTATGCAGGGGC  
 CCCAGACTCCCCAGTCAACCAGCAGTTCATGGCAGAAGGAGGAGACTTAAAGCCACCAACTCCAGCATC  
 CACACCACACAGTCAAGTCCCCCATTGCCAGGCATGAGCAGGAGCAATTCAGTTGGGATCCAGGATGCC  
 TTTAATGATGGAAGTGACTCCACATTCCAGAAGCGGAATTCATGACTCCAAACCCTGGGTATCAGCCCA  
 GTATGAATACCTCTGACATGATGGGGCGCATGTCTATGAGCCAAATAAGGATCCTTATGGCAGCATGAG  
 GAAAGTCCAGGGAGTGATCCCTTCATGTCTCAGGGCAGGGCCCCAACGGCGGGATGGGTGACCCCTAC  
 AGTCGTGCTGCCGGCCCTGGGCTAGGAAATGTGGCGATGGGACCACGACAGCACTATCCCTATGGAGGTC  
 CTTATGACAGAGTGAGGACGGAGCCTGGAATAGGGCCTGAGGGAAACATGAGCACTGGGGCCCCACAGCC  
 GAATCTCATGCCTTCAACCCAGACTCGGGATGATTTCTCCTAGCCGCTACCCCCGCAGCAGCAGCAG  
 CAGCAGCAGCAACGACATGATTCCTATGGCAATCAGTTCTCACCCAAGGCACCCCTTCTGGCAGCCCT  
 TCCCAGCCAGCAGACTACAATGTATCAACAGCAACAGCAGAATTACAAGCGGCAATGGATGCCACATA  
 TGGCCCTCCTGCCAAGCGGCACGAAGGGGAGATGTACAGCGTGCCATACAGCACTGGGCAGGGGCAGCCT  
 CAGCAGCAGCAGTTGCCCCAGCCAGCCAGCCTGCCAGCCAGCAACAAGCTGCCAGCCTTCCCTC  
 AGCAAGATGTATAACAACCAGTATGGCAATGCCTATCCTGCCACTGCCACAGCTGCTACTGAGCGCCGACC  
 AGCAGGGCGCCCCAGAACCAATTTCCATTCCAGTTTGGCCGAGACCGTGTCTCTGCACCCCTGGCACC  
 AATGCCAGCAAAAACATGCCACCACAAATGATGGGCGGCCCATACAGGCATCAGCTGAGGTTGCTCAGC  
 AAGGCACCATGTGGCAGGGGCGTAATGACATGACCTATAATTATGCCAACAGGCAGAGCAGGGGCTCTGC  
 CCCCCAGGGCCCCGCTATCATGGCGTGAACCGAACAGATGAAATGCTGCACACAGATCAGAGGGCCAAC  
 CACGAAGGCTCGTGGCCTTCCCATGGCACAGCCAGCCCCATATGGTCCCTCTGCCCTGTGCCCCCA  
 TGACAAGGCCCTCCATCTAACTACCAGCCCCACCAAGCATGCAGAATCACATTCCTCAGGTATCCAG  
 CCCTGCTCCCCTGCCCGGCCAATGGAGAACCACCTCTCCTAGCAAGTCTCCATTCTGCACTCTGGG  
 ATGAAAATGCAGAAGGCAGGTCCCCAGTACCTGCCTCGACATAGCACCTGCCCTGTGCAGCCCCCA  
 TGATTCGGCGGGATATCACCTTCCCACCTGGCTCTGTTGAAGCCACACAGCCTGTGTTGAAGCAGAGGAG  
 GCGGCTCACAATGAAAGACATTGGAACCCCGGAGGCATGGCGGTAATGATGTCCCTCAAGTCTGGTCTC

CTGGCAGAGAGCACATGGGCATTAGATACCATCAACATCCTGCTGTATGATGACAACAGCATCATGACCT  
TCAACCTCAGTCAGTCCCAGGGTTGCTAGAGCTCCTTGTAGAATATTTCCGACGATGCCTGATTGAGAT  
CTTTGGCATTTTAAAGGAGTATGAGGTGGGTGACCCAGGACAGAGAACGCTACTGGATCCTGGGAGGTTT  
AGCAAGGTGTCTAGTCCAGTCCCATGGAGGGTGGGGAAGAAGAAGAAGAACTTCTAGGTCTAACTAG  
AAGAGGAAGAAGAAGAGGAAGTAGTTGAAAATGATGAGGAGATAGCCTTTTCAGGCAAGGACAAGCCAGC  
TTCAGAGAATAGTGAGGAGAAGCTGATCAGTAAGTTTGACAAGCTTCCAGTAAAGATCGTACAGAAGAAT  
GATCCATTTGTGGTGGACTGCTCAGATAAGCTTGGGCGTGTGCAGGAGTTTGACAGTGGCCTGCTGCAT  
GGCGGATTGGTGGGGGGACACCACTGAGCATATCCAGACCCACTTCGAGAGCAAGACAGAGCTGCTGCC  
TTCCCGCCTCACGCACCTGCCACCAGCCCCTCGGAAGCATGTGACAACAGCAGAGGGTACACCAGGG  
ACAACAGACCAGGAGGGGCCCCACCTGATGGACCTCCAGAAAAACGGATCACAGCCACTATGGATGACA  
TGTTGTCTACTCGGTCTAGCACCTTGACCGAGGATGGAGCTAAGAGTTCAGAGGCCATCAAGGAGAGCAG  
CAAGTTTCCATTTGGCATTAGCCCAGCACAGAGCCACCGGAACATCAAGATCCTAGAGGACGAACCCAC  
AGTAAGGATGAGACCCCACTGTGTACCCTTCTGGACTGGCAGGATTCTCTTGCCAAGCGCTGCGTCTGTG  
TGTCGAATACCATTGGAAGCCTGTCAATTTGTGCCAGGCAATGACTTTGAGATGTCCAAACACCCAGGGCT  
GCTGCTCATCCTGGGCAAGCTGATCCTGCTGCACCACAAGCACCCAGAACGGAAGCAGGCACCACTAACT  
TATGAAAAGGAGGAGGAACAGGACCAAGGGGTGAGCTGCAACAAAGTGGAGTGGTGGTGGGACTGCTTGG  
AGATGCTCCGGGAAAACACCTTGTTTACTCGCCAACATCTCGGGGCAGTTGGACCTATCTCCATACCC  
CGAGAGCATTTGCCTGCCTGTCTGGACGGACTCCTACTGGGCAGTTTGCCTTCAGCTGAAGCCAG  
GACCCCTTTCCACCCTGGGCCCAATGCCGTCTTTCCCGCAGAGACTGGTCTTGAAACCCTCAGCA  
AACTCAGCATCCAGGACAACAATGTGGACCTGATTCTGGCCACACCCCTTCAGCCGCCTGGAGAAGTT  
GTATAGCACTATGGTGCCTTCTCAGTGACCGAAAGAACCCGGTGTGCCGGGAGATGGCTGTGGTACTG  
CTGGCCAACCTGGCTCAGGGGGACAGCTGGCAGCTCGTGCCATTGCAGTGCAGAAGGGCAGTATCGGCA  
ACCTCCTGGGCTTCTAGAGGACAGCCTTGCCGCCACACAGTTCAGCAGAGCCAGGCCAGCCTCTCCA  
CATGCAGAACCCACCCCTTTGAGCCAAGTGTGGACATGATGCGGCGGGCTGCCCGCGCTGCTTGCC  
TTGGCCAAGGTGGACGAGAACCCTCAGAGTTTACTCTGTACGAATCACGGCTGTTGGACATCTCGGTAT  
CACCGTTGATGAACCTATTGGTTTACAAAGTCAATTTGTGATGACTGTTTTTATTGGCCAGTCA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG218151 representing NM\_006015  
 Red=Cloning site Green=Tags(s)

```

MAAQVAPAAASSLGNPPPPSELKKAEEQQQREEAGGEEAAAAAERGEMKAAAGQESEGPVAVGPPQPLG
KELQDGAESNGGGGGGAGSGGGPGAEPDLKNSNGNAGPRPALNNL TEPPGGGGGSSDVGAPPHSAA
AALPPPAYGFGQPYGRSPSAVAAAAAVFHQQHGGQSPGLAALQSGGGGLEPYAGPQQNSHDHGFPNH
QYNSYYPNRSAYPPPAPAYALSSPRGGTPGSGAAAAAGSKPPSSASASSSSSSFAQQRFGAMGGGGPS
AAGGGTPQPTATPTLNQLLTSPPSARGYQGYPGDYSGGPQDGGAGKGPADMASQCWGAIAAAAAAAAAAAS
GGAQQRSHHAPMSPGSSGGGQPLARTQPSSPMDQMGMKRPQPYGGTNPYSQQQGPPSGPQQGHGYPGQ
PYGSQTPQRYPMTMQGRAQSAMGGLSYTQQIPPYGQQGPGSGYGGQQGQTPYYNQSPHPQQQPPYSQQPP
SQTPHAQPSYQQPQSPPQLQSSQPPYSQQPSQPPHQQSPAPYPSQQSTTQQHPQSQPPYSQPQAQSPY
QQQQPQQPAPSTLSQQAAYPQPSQQSQQTAYSQQRFPQPQLSQDSFGSQASSAPSMSSKGGQEDMNL
SLQSRPSSLPDLSGSIDDLPMTGTEGALSPGVSTSGISSSQGEQSNPAQSPFSPHTSPHLPGRGSPSPV
GSPASVAQSRSGPLSPAAPVGNQMPRPPSGQSDSIMHPSMNQSSIAQDRGYMQRNPQMPQYSSPQFGSA
LSPRQPSGGQIHTGMGSYQNSMGSYGPGGGYGPQGGYPRQPNYNALPNANYPSAGMAGGINPMGAGGQ
MHGQPGIPPYGTLPGRMSHASMGNRYPGNMANMPPQVSGSMCPPPGGMNRKTQETAVAMHVAANSIQN
RPPGYPNMQGGMMGTGPPYGGQINSMAGMINPQPPYSMGGTMANNASAGMAASPEMMGLGDVCLTPATK
MNNKADGTPKTESKSKSSSSTTTNEKITKLYELGGEPEKMMWVDRLAFTEEKAMGMTNLPAVGRKPLD
LYRLYVSVKEIGGLTQVKNKKWRELATNLNVGTSSSAASSLKKQYIQCLYAFECKIERGEDPPPDIFAA
ADSKKSQPKIQPPSPAGSGSMQGPQTPQSTSSSMAEGGDLKPPTPASTPHSQIPPLPGMSRSNSVGIQDA
FNDGSDSTFKRNSMTPNPGYQPSMNTSDMMGRMSYEPNKDPYGSMRKAPGSDPFMSSGGQPNGGMGDPY
SRAAGPGLGNVAMGRQHYHYGGPYDRVRTEPGIGPEGNMSTGAPQPNLMPNSPDSGMYSVPYSTGGQGP
QQQQRHDSYGNQFSTQGTSPSGSPFSSQQT TMYQQQQNYKRPMDGTYGPPAKRHEGEMYSVPYSTGGQGP
QQQQLPPAQPPASQQQAAQPSQPDVYNQYGNAYPATATAATERRPAGGPQNQFPFQFGRDRVSAPPGT
NAQQNMPPQMMGGPIQASAEVAQQGTMWQGRNDMTYNYANRQSTGSAPQGPAYHGVNRTDEMLHTDQRAN
HEGSWPSHGTRQPPYGPSAPVPPMTRPPPSNYQPPSMQNHIPQVSSPAPLPRPMENRTSPSKSPFLHSG
MKMQKAGPPVPASHIAPAVQPPMIRRDITFPGPSVEATQPVLKQRRRLTMKDIGTPEAWRVMMSLKSGL
LAESTWALDTINILLYDDNSIMTFNLSQLPGLLELLVEYFRRCLIEIFGILKEYEVDGPGQRTLLDPGRF
SKVSSPAPMEGEEEEELLGPKLEEEEEVEENDEEIAFSGKDKPASENSEKLSKFDKLPVKIVQKN
DPFVVDKSLGRVQEFDSGLLHWIRIGGDTTEHIQTHFESKTELLPSRPHAPCPPAPRKHVTTAEGTPG
TTDQEGPPPDGPPPEKRITATMDDMLSTRSSTLTEDGAKSSEAIKESKFPFGISPAQSHRNKILEDEPH
SKDETPLCTLLDWQDSLAKRCVCSNTIRSLSFVPGNDFEMSKHPGLLLILGKLLILLHKKHPERKQAPLT
YEKEEQDQGVSCNKVVEWWDCLEMLRENTLVTLANISGQLDLSPYPESICLPVLDGLLHWAVCPSAEAQ
DPFSTLGPNAVLSPQRLVLETLSKLSIQDNNVDLILATPPFSRLEKLYSTMVRFSLDRKNPVCREMAVVL
LANLAQGDLSAARAIAVQKGSIGNLLGFLEDSLAAATQFQQSQASLLHMQNPPFEPTSVDMMRRAARALLA
LAKVDENHSEFTLYESRLLDISVSPLMNSLVSQVICDVLFLIGQS
  
```

TRTRPLE - GFP Tag - V

**Restriction Sites:** Sgfl-MluI



**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\\_006015.6](#)

**RefSeq Size:** 8595 bp

**RefSeq ORF:** 6858 bp

**Locus ID:** 8289

**UniProt ID:** [O14497](#)

**Cytogenetics:** 1p36.11

**Protein Families:** Druggable Genome

**Gene Summary:** This gene encodes a member of the SWI/SNF family, whose members have helicase and ATPase activities and are thought to regulate transcription of certain genes by altering the chromatin structure around those genes. The encoded protein is part of the large ATP-dependent chromatin remodeling complex SNF/SWI, which is required for transcriptional activation of genes normally repressed by chromatin. It possesses at least two conserved domains that could be important for its function. First, it has a DNA-binding domain that can specifically bind an AT-rich DNA sequence known to be recognized by a SNF/SWI complex at the beta-globin locus. Second, the C-terminus of the protein can stimulate glucocorticoid receptor-dependent transcriptional activation. It is thought that the protein encoded by this gene confers specificity to the SNF/SWI complex and may recruit the complex to its targets through either protein-DNA or protein-protein interactions. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]