

Product datasheet for **RG211454**

ARID5B (NM_032199) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ARID5B (NM_032199) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ARID5B
Synonyms:	DESRT; MRF-2; MRF2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG211454 representing NM_032199 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGCCCAACTCACTCCAGTGGGTCGGCTCACCGTGTGGCTTGACGGACCTTACATTTTCTACAAGG
CTTTTCAATTCACCTTGAAGGCAAACCAAGAATTTGTCCCTTGGCGACTTTTTCTTTGAAGATGTAC
GCCAAAGGATCCGATTTGCATAGCGGAGCTCCAGCTGTTGTGGGAAGAGAGGACCAGCCGGCACTTTTA
TCCAGCTCTAAACTTTATTTCTCCAGAAGACACTCCCCAGGGCAGAAATAGCGACCATGGCGAGGATG
AAGTCATTGCTGTTTCCGAAAAGGTGATTGTGAAGCTTGAAGACCTGGTCAAGTGGGTACATTCTGATTT
CTCCAAGTGGAGATGTGGCTTCCACGCTGGACCACTGAAAACCTGAGGCCTTGGGAAGGAATGGACAGAAG
GAAGCTCTGCTGAAGTACAGGCAGTCAACCTAAACAGTGGACTCAACTTCAAAGACGTTCTCAAGGAGA
AGGCAGACCTGGGGGAGGACGAGGAAGAAACGAACGTGATAGTTCTCAGTACCCCCAGTACTGCCGGTA
CCGCTCGATGCTGAAACGCATCCAGGATAAGCCATCTTCCATTCTAACGGACCACTTTCATTGGCCCTG
GGGGCATTGCAGTGGTCAAGCAGGAACCTCAGATCCTGTACTGTGGGACACCTTTGACCACCCGACTC
TCATAGAAAACGAGAGTATATGCGATGAGTTTGCGCCAAATCTTAAAGGCAGACCACGCAAAAAGAAACC
ATGCCACAAAAGAGATTCAATCAGTGGTGTAAAGATTCCAACAACAATCCGATGGCAAAGCCGTT
GCCAAGGTGAAATGTGAGGCCAGTCAAGCTTGACCAAGCCGAAAGAATAACCAACTGTAAAAAGTCT
CAAATGAAGAAAACCAAGTTGCCATTGGTGAAGAGTGCAGGGCAGATGAACAAGCCTTCTTGGTGGC
ACTTTATAAATACATGAAAGAAAGGAAAACGCCGATAGAACGAATACCCTATTTAGGTTTTAAACAGATT
AACCTTTGGACTATGTTTCAAGCTGCTCAAAAACCTGGGAGGATATGAAACAATAACAGCCCGCCGTCAGT
GGAAACATATTTATGATGAATTAGGCGTAATCCTGGGAGCACCAGCGTGCCACTTGTACCCGCAGACA
TTATGAAAGATTAATCCTACCATATGAAAGATTTATTAAGGAGAAGAAGATAAGCCCTGCCTCCAATC
AAACCTCGGAAACAGGAGAACAGTTCACAGGAAAATGAGAACAAAACAAAAGTATCTGGAACCAACGCA
TCAAACATGAAATACCTAAAAGCAAGAAAGAAAAGAAAATGCCCAAAGCCCCAGGATGCAGCAGAGGT
TTCATCAGAGCAAGAAAAGAACAAGAGACTTTAATAAGCCAGAAAAGCATCCCTGAGCCTCTCCAGCA



GCAGACATGAAGAAAAAATAGAAGGTATCAGGAATTTTCAGCGAAGCCCTGGCATCCAGAGTAGACC
CAGAGAAGGACAACGAAACAGACCAAGGTTCCAACAGTGAGAAGGTGGCAGAGGAGCGGGAGAGAAGGG
GCCACACCTCCACTCCCAAGTGTCTCTGGCCCCAGAAAAAGATTCAGCCTTGGTCCCTGGGGCCAGC
AAACAGCCACTCACCTCTCTAGTGCCTGGTGGACTCAAACAAGAATCCAAACTGTGTGTTTTACAG
AGAGCCCTGAAAGTGAACCCCAAGAAGCATCTTCCCAGCTTCCCACCACACAGCCACCGCTGGCAA
CCAGAATGAGACGGAGGATGACAAACTGCCCGCCATGGCAGATTACATTGCCAATGCACCGTGAAGGTG
GACCAGCTGGGCAGTGACGACATCCACAATGCGCTCAAGCAGACCCCAAGGTCTTGTGGTCCAGTCGT
TTGACATGTTCAAAGACAAGACCTGACTGGGCCATGAACGAGAACCATGGACTTAATTACACGCCCT
GCTCTACTCTAGGGCAACCCAGGCATCATGTCCCCTACTGGCCAAGAAAAAGCTTTTGTCCCAAGTGAGT
GGGGCCAGCCTCTCCAGCAGCTACCCTTATGGCTCCCCACCCCTTTGATCAGCAAAAAGAACTGATTG
CTAGGGATGACTTGTGTTCCAGTTTGTCCAGACCCACCATGGCCAAAGCACTGACCATATGGCGGTGAG
CCGGCCATCAGTGATTGACGACGTCCAGAGTTTCAAGAAGCAAGCCCTCGGAAGAGAGAAAGACCATCAAT
GACATCTTAAGCATGAGAACTGAGTCGATCAGATCCCACCGCTGCAGCTTCTCCAAGCATCACCTTA
ACCCCTTGTGACTCCTACGTCCTGAAGCAAGAAATTCAGGAGGGCAAGGATAAACTCTTAGAGAAAAG
GGCCCTCCCCATTCCCACATGCCTAGCTTCTGGCTGACTTCTACTCGTCCCCTCATCTCCATAGCCTC
TACAGACACACCGAGCACCATCTTCATAATGAACAGACATCCAAATACCTTCCAGGGACATGTACAGGG
AATCGGAAAACAGTTCTTTTCTTCCCACAGACACCAAGAAAAGTCCATGTAATTTATCTCACGTCCT
GCACCTGCAAGACAAAAGTTCGGCGGCAGCAGAAGCCCTACGGATGATCAGCCTACAGATCTGAGCCTT
CCCAAGAACC CGCACAAACCTACCGGCAAGGTCTGGGCTGGCTCATTCCACCACAGGGCCCCAGGAGA
GCAAAGGCATCTCCAGTTCAGGTCTTAGGCAGCCAGAGTCGAGACTGTCACCCCAAAGCCTGTGGGT
ATCACCCATGACCATGTCAGGCCCTAAAAATACCCTGAATCGCTTTCAAGATCAGGAAAACCTCACCAT
GTGAGACTGGAGAATTTCAAGGAAGATGGAAGGCATGGTCCACCAATCCTGCACCGGAAAATGAGCCCGC
AGAACATTTGGGGCGCGCGCCGATCAAGCGCAGCCTGGAGGATTTGGACCTTGATTGCAGGGAAAAA
GGCCCGGGCAGTGTCTCCCTTAGACCCATCCAAGGAGGTCTCTGGGAAGGAGAAGGCCTCTGAGCAGGAG
AGTGAAGGCAGCAAAGCAGCGCACGGTGGGCAATTCGGGGGCGGATCAGAAGGCCACAAGCTTCCCTCT
CCTCCCCTATCTTCCAGGTCTGTATTCCGGGAGCCTGTGTAATCGGGCCTCAACTCCAGGCTCCCGGC
TGGGTATTCTCATTCTCTGCAGTACTTAAAAACCAGACTGTGCTTTCTCCACTCATGCAGCCCCTGGCT
TTCCACTCGTGTGATGCAAAGAGGAATTTTACATCACCGACAAATCTCAGCAGCTGTACAGACT
TGGCTGCGGCTACACCTGTAGGAAGTTCATATGGGGACCTTTTGCATAACAGCATTTACCCTTTAGCTGC
TATAAATCCTCAAGCTGCCTTTCCATCTTCCCAGCTGTCATCCGTGCACCCAGTACAAAAGT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

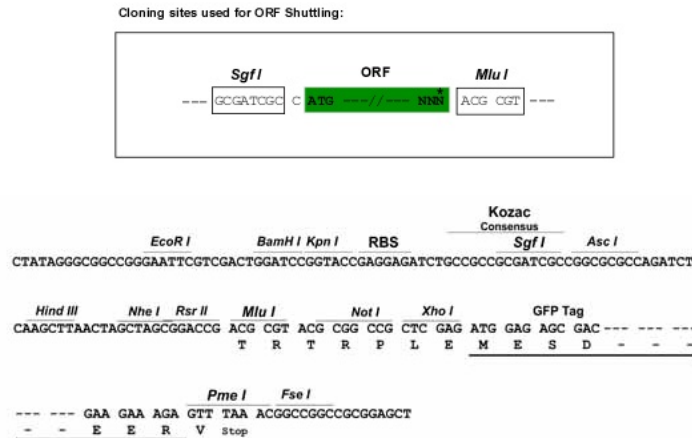
Protein Sequence: >RG211454 representing NM_032199
 Red=Cloning site Green=Tags(s)

```
MEPNLSLQWVGSPCGLHGPIYFYKAFQFHLEGKPRILSLGDFFFVRCPTKDPICIAELQLLWEERTSRQLL
SSSKLYFLPEDTPQGRNSDHGEDEVIIVSEKVIKLEDLVKWVHSDFSKWRCGFHAGPVKTEALGRNGQK
EALLKYRQSTLNSGLNFKDVLKEKADLGEDEEETNVIVLSYPQYCRYRSMKRIQDKPSSILTDQFALAL
GGIAVVSARNPQILYCRDTFDHPTLIENESICDEFAPNLKGRPRKKKPCQRRDSFSGVKDSNNNSDGKAV
AKVKCEARSALTKPKNNHNCKKVSNEEKPKVAIGEECRADQAFLLVALYKMKERKTPIERIPYLGFKQI
NLWTFQAAQKLGGETITARRQWKHIYDELGGNPGSTSAATCTRRHYERLILPYERFIKGEEDKPLPPI
KPRKQENSSQENENKTKVSGTKRIKHEIPKSKKEKENAPKQDAAEVSSEQEKEQETLISQKSIPEPLPA
ADMKKKIEGYQEFSAKPLASRVDPKDNEDQGSNSEKVAEEAGEKGPTPLPSAPLAPEKDSALVPGAS
KQPLTSPSALVDSKQESKLCCTESPESEPQEAFFSPFTTQPPLANQNETEDDKLPAMADYIANCTVKV
DQLGSDDIHNALKQTPKVLVVQSFDMFKDKDLTGPMNENHGLNYTPLLYSRGNPGIMSPLAKKKLLSQVS
GASLSSSYPYGSPPPLISKKKLIARDDLCSLSQTHHGQSTDHMAVSRPSVIQHVQSFRRSKPSEERKTIN
DIFKHEKLSRSDPHRCFSFKHHLNPLADSYVLKQEIQEGKDKLLEKRALPHSHMPSFLADFYSSPHLHSL
YRHTTEHHLHNEQTSKYPSRDMYRESENSFP SHRHQEKLVHNYLTSLSHLQDKKSAEAAPTDDQPTDL
PKNPHKPTGKVLGLAHSTTGQESKGISQFQVLGSQSRDCHPKACRVSPMTMSGPKKYPELSRSRGKPHH
VRLNFRKMEGMVHPILHRKMSPQNIGAARPIKRSLEDLDLVIAGKKARAVSPLDPSKEVSGKEKASEQE
SEGSKAAHGGHSGGGSEGHKLLPSSPIFPGLYSGSLCNSGLNSRLPAGYSHSLQYLKNQTVLSPLMQPLA
FHSLVMQRGIFTSPNTSQQLYRHLAAATPVGSSYGDLLHNSIYPLAAINPQAAPSSQLSSVHPSTKL
```

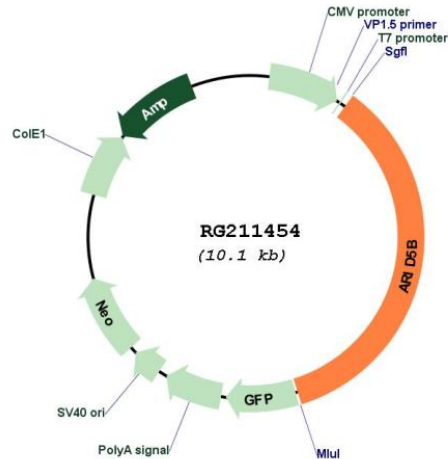
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_032199

ORF Size: 3564 bp

OTI Disclaimer: 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_032199.3](#)

RefSeq Size: 7507 bp

RefSeq ORF: 3567 bp

Locus ID: 84159

UniProt ID: [Q14865](#)

Cytogenetics: 10q21.2

Gene Summary:

This gene encodes a member of the AT-rich interaction domain (ARID) family of DNA binding proteins. The encoded protein forms a histone H3K9Me2 demethylase complex with PHD finger protein 2 and regulates the transcription of target genes involved in adipogenesis and liver development. This gene also plays a role in cell growth and differentiation of B-lymphocyte progenitors, and single nucleotide polymorphisms in this gene are associated with acute lymphoblastic leukemia. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Sep 2011]