

Product datasheet for **RG218211**

ARHGAP20 (NM_020809) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ARHGAP20 (NM_020809) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ARHGAP20
Synonyms:	RARHOGAP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG218211 representing NM_020809 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAAGCGATGTCCCCCAGCAGGAGACTCTAGGGGGACAGCCGGGGCGCTCCTCTTCCCTGACAGGAG
TGTCTCGGCTCGCGGGAGGCAGCTGCACCAAGAAGAAAATGAAAACACTAGCAGAAAGGAGGAGGAGCGC
TCCATCTCTTATCCTGGATAAAGCCCTACAAAAACGGCCTACTACCAGGGACAGTCTTCTGCTAGTGT
GACACATGCACATTTCTGTCATCATTAGTGTGCTCCAATAGGACTCTGCTGATTGATGGCCGGGCAGAAC
TCAAAAGAGGCCCTCCAGAGGCAGGAGCGGCATCTTTTCCTATTCAATGATCTGTTTGTGGCCAAAAT
CAATATAACAATAACTTTAAGATAAAAAATAAATTAATTAATGATATGTGGACAGCAAGCTGTGTG
GATGAAGTGGGAGAAGGCAACCAATGCCATGAAATCCTTTGTTTGGGCTGGCCACAGTGAACCTTTG
TGGCCACTTTTCAGTTCTCCAGAACAAAGGACAAATGGCTCTCTCTCCTCAGAGATACATCAATCTAGA
GAAAGAAAAGGACTACCCGAAGAGCATTCCCCTCAAAATCTTCGCAAGGACATTGGGAATTGTGCCTAC
TCTAAACTATAACAGTAATGAATTCAGATACAGCGAATGAAGTTATCAACATGTCATTACCAATGCTAG
GGATAACTGGCTCTGAGAGAGATTACCAGTTGTGGTCAATTCTGGCAAAGAAGAGGCTCCATACCCACT
CATTGGGCATGAATATCCATATGGAATTAATGAGCCATCTTCGAGACTCTGACTCCTGACACCGGGA
TCAAAGGACTCTACCACCCCTTCAACCTCCAGGAGCCCTTCTTATGGAACAGCTCCCCGAGAGATGC
AGTGCCAGTTTCATCTGAAGCCAGCCGCTGGCTGCAGCCAGCAACTGAGTGATTGAGGTCATAAGAC
ATTTAAAAGGAGAAGATCTATCATAAACTGGGCCTTCTGGCGAGTTCTAGCACTCACCTGGACAATTG
CCCTCATCGCAACATCACCTATGCCAGGACAGCTCTTTGGAATTTCTCTGCCAAATATTTGTGAGAATG
ACAATCTGCCAAACCTGTCTGGATATGCTTTTCTTTCTTAATCAAAAAGGACCTCTACCAAAGGTAT
CTTCAGGCAATCAGCCAATGTGAAATCTGCAGAGAACTAAAAGAGAAATGAATTCGGAGTCGAAGTA
CACCTAGACTGTGAATCTATTTTGTGATAGCATCTGTCTAAAGGATTTCTGCGAAATATTCAGGAA
GTATTTTTTTCATCAGATCTATGATCACTGGTCTCTGTAATGGATCAAGGAAATGATGAAGAGAAAAT
AAATACTGTTCAAAGGCTATTAGACCAGCTTCCGAGAGCCAATGTTGTTCTCCTAAGGTATCTTTTGGG



GTGTTACACAACATTGAGCAACATTCCTCATCCAATCAGATGACTGCATTTAATTTAGCTGTGTGTGTCG
CTCCAAGTATTCTTTGGCCTCCTGCTTCTCCAGCCCAGAACTAGAAAACGAATTTACAAAAAGGTTTC
CCTGCTTATACAATTTCTGATTGAGAATTGCCTTAGGATATTTGGAGAAGAAATCACTTCCCTCTCAGA
GAGGTTTCAGTGAGATGTGACACTAGAGAGAATGCCTCAGATATTTCTTGCTTTCAACTGAATGACTCCT
CCTATGACAGCTTGAAAAATGAGCTAAATGAGGATGTTGATGCACCATGCAGTGACTTGGTAAAGAACT
TGGCCAGGGGAGCAGAAGCATGGACTCTGTCTTAACCCCTCAGTGACTATGATCTTGACCAGCCCGAGGTG
GAAGGCCTTTTAAACCCTAAGCGACTTTGACTTGGCCCATTTCTAAAGATGAAGATGTTCAAATGAAACGGC
CTCTTGAATCCAAGCCGGTGAACATTTTGTGTACACAAAAGATCCCACTGCGGGATCATGCCAGGGCCCC
ATCTGCCATGTGCACACCCAGCTACCTGTCCACAGCTGCAGCAAATGCTGCAAAAAGCCTGAGGCGACAC
CGGCGTTGCTCAGAGCCCAGCATCGACTATCTGGATTCAAAGCTTTCCTACCTCAGGGAGTTTTATCAGA
AAAAGCTACGCAAGTCCAGCTGTGATGCAATTTCTTCTCAAAAAGATGAAGACTATCTGAAGCAGAATCA
ACCCCTCCAGGAGGAAGGAAAGACATGTTTTAAACAGAGTTTAGTCACAGGCACTGATGCAGCAAGAAA
AATGCCACTACTCAAAACTAAGAAGAAAAGCTTGTCTGGTAGTGAAGGAAATCACGTGAAACTTTTCC
CTAAGTCTAAGCCAGTGGCCATTTCTGTGGCATTTATAGTCTATGTCCTCACAGGATCATTCCAAGAA
CCAGCCCTTTGATGTGAATACATCTGGATACTCCCAACACACAGCAGATGCCCTCAAGGGTCCAAGG
ACACATCGGGCGTCTCAGAGCCCAACATAGAAGACCAGAACCAGCAAGCTGACCTATCTCAGGGGAATTT
ATTCAAAGAAAACAACATAAAACCAGCTGTGAAGCTGGTCTCTTGATGGAGAGGAGGATTATCTCAAACG
GCATAAGTCTTTGCAAATGGAGGGGAGAAAGCTCATTAAATCAGAGTTTAGTCATGGGGATTGAGGTGGG
AAGAGTAGTGCCAAAACCAAAACTGAGAAGGTTTTACCCCAAGATTAACCTTTGCCCAAGGACCA
GCTATTCAGCTTATCCTCCCCAGGCACTTCCCATCCGGCTCATCAGTAAGCTCCCAAGACAGTGTCTT
TTCTCAGATTTCTGAACACTCTGTGTTACACCCACTGAGACTTCTCTCCAATAGATTGCACTTTTCAG
GCTCAGAGAAAACGGGAAGACCTTCTCCTGACTTTAGCAATGCCAGCCATGTTTCCGGAATGCCCGGTC
CCTCATCAGGGCAGGCTTGACAGCCGCCAGCCTATACAAAGAAGGACACCATGGAGTGGCATTACAAAT
GCATTCTGTAACCTTTCATCCCAGCACATGGTTGAGAAAATGGTGTGGCCAGTTTGAAAAACTGGTCCCTC
AAAAAGAAAGCAAAGGCAGCCAGACCAGAGGAAGAGAAAATAGCTTCTCAAAAGGACCCTTAGAGCCAC
CCCCACATGCTTCTGGTGTCCAGAAGCCAACACTGCAAGAGGAACAAAAAGACTTGCCTTAAGGGC
AGCTGAAGGACTGTCCCCTGTGCAGTCAGCCAAAGGTGTAGTTCTTCTCCCTTCCAGGACTCAGAGAGA
CACTGTAGCTCTCATTAGCCTGGTGGAGAGCAGACTTAAGCTGTGCATGAAGTCACATGAGGAAATAG
AGCCTGGTAGTCAGAGCTCTTCTGGTCTCTGCCTTGGGAAAGAGCCTCAGCCAGCTCTTGACTCTAGA
GGATGCGACCAGCCAGACTCAGGGCCTACAGTGGTCTGCGACATTGAGGACAGGTATTTAACCAAAGAC
ATT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG218211 representing NM_020809
 Red=Cloning site Green=Tags(s)

```

MEAMSPQQETLGGQPGRSSSLTGVSRLAGGSCTKKMKMTLAERRRSAPSLILDKALQKRPTTRDSPASV
DTCTFLSSLVCSNRTLLIDGRAELKRGLQRQERHLFLFNDLFVVAIKIYNNNFKIKNKIKLDMWTASCV
DEVGEGNTAMKSFVLGWPTVNFVATFSSPEQKDKWLSLLQRYINLEKEKDYPKSIPLKIFAKDIGNCAY
SKTITVMNSDTANEVINMSLPLMGITGSERDYQLWVNSGKEEAPYPLIGHEYPIYGIKMSHLRDSALLTPG
SKDSTTPFNLQEPFLMEQLPREMQCFILKPSRLAAAQQLSDSGHKTFRRRRSIINWAFWRGSSTHLDNL
PSSPTSPMPGQLFGISLPNICENDNLPKPVLDMLFFLNQKGPLTKGIFRQSANVKSCRELKEKLSNGVEV
HLDCEIFVIA SVLKDFLRNIPGSI FSSDLYDHWVSVMDQGNDEEKINTVQRLDQLPRANVLLRRLFV
VLHNIEQHSSSNQMTAFNLAVCVAPSILWPPASSSPELENEFTKKVSLLIQFLIENCLRIFGEEITSLFR
EVSVRCDTRENASDISCFQLNDSSYDLENELNEDVDAPCSDLVKKLGQGRSMDSVLTLSDYDLQPEV
EGLLTLSDFDLAHSDKDEDVQMKRPLESKPVNILVYTKIPLRDHARAPSAMCTPSYLSTAAANAASLRRH
RRCSEPSIDYLSKLSYLREFYQKLRKSSCDAILSQKDEDYLRKQNPQEEGKCFKQSLVTGTDVSKK
NATTQNTKKKSLSGSEGNHVKLPKSKPVAISVASYSMPSSQDHSKNQPFVNTSGYSPPHADALKGPR
THRRCEPNIEDQNRKLYLRGIYSKKQHKTSCEAGLLHGEEDYLKRHKSQMEGQKLINQSLVMGIEVG
KSSATNQNTKVLPPRLNLCPRTSYSSLSPPGTSPPSGSSVSSQDSAFSQISEHSVFTPTETSSPIDCTFQ
AQRKREDLSPDFSNASHVSGMPGSSGQACSRPAYTKKDTMEWHSQMHSVTLHPSTWLRNGVASLKNWSL
KKKAKAARPEEEKIASPKGPLEPPPHASGVPEANSLQEEQKDLPLRAAEGSPVQSAQRCS SSPFDSE
HCSSPFSLVESRLKLCMKSHIEIEPGSQSSSGSLPWERASASSWTLEDATSPDSGPTVVCDIEDRYLTKD
I
  
```

TRTRPLE - GFP Tag - V

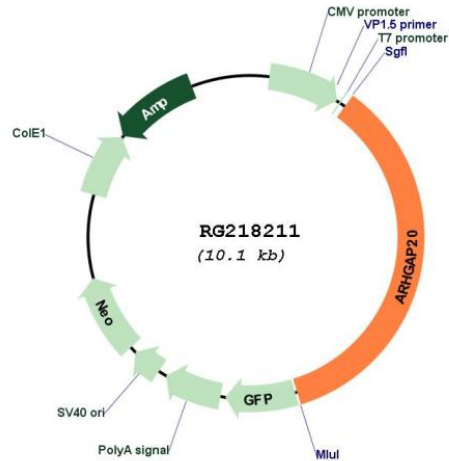
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_020809

ORF Size: 3573 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_020809.3](#), [NP_065860.2](#)

RefSeq Size: 6207 bp

RefSeq ORF: 3576 bp

Locus ID: 57569

UniProt ID: [Q9P2F6](#)

Cytogenetics: 11q22.3-q23.1

Gene Summary:

The protein encoded by this gene is an activator of RHO-type GTPases, transducing a signal from RAP1 to RHO and impacting neurite outgrowth. [provided by RefSeq, Sep 2016]