

## Product datasheet for **RG235201**

### ARHGAP20 (NM\_001258416) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ARHGAP20 (NM_001258416) 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:	>RG235201 representing NM_001258416 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGACATTTTGGATTATAATAAATAAGAAAATGAAAACACTAGCAGAAAGGAGGAGGAGCGCTCCATCTC  
TTATCCTGGATAAAGCCCTACAAAAACGGCCTACTACCAGGGACAGTCCTTCTGCTAGTGTGGACACATG  
CACATTTCTGTCATCATTAGTGTGCTCCAATAGGACTCTGCTGATTGATGGCCGGCAGAACTCAAAGA  
GGCCTCCAGAGGCAGGAGCGGCATCTTTTCTATTCAATGATCTGTTTGTGGCCAAAATCAAATATA  
ACAATAACTTTAAGATAAAAAATAAAATTAATTAAGTATGTGGACAGCAAGCTGTGTGGATGAAGT  
GGGAGAAGGCAACACCAATGCCATGAAATCCTTTGTTTGGGCTGGCCACAGTGAACCTTTGGCCACT  
TTCAGTTCTCCAGAACAAAAGGCAAAATGGCTCTCTCTCCTTCAGAGATACATCAATCTAGAGAAAGAAA  
AGGACTACCCGAAGAGCATTCCCCTCAAATCTTCGCCAAGGACATTGGGAATTGTGCCTACTCTAAAAC  
TATAACAGTAATGAATTCAGATACAGCGAATGAAGTTATCAACATGTCTATTACCAATGCTAGGGATAACT  
GGCTCTGAGAGAGATTACCAGTTGTGGTCAATCTGGCAAGAAGAGGCTCCATACCCACTCATTGGGC  
ATGAATATCCATATGGAATTAATGAGCCATCTCGAGACTCTGCACTCCTGACACCGGGATCAAAGGA  
CTCTACCACCCCTTTCAACCTCCAGGAGCCCTTCTTATGGAACAGCTCCCCGAGAGATGCAGTGCCAG  
TTCATCCTGAAGCCAGCCGCTGGCTGCAGCCAGCAACTGAGTGATTCAAGTATAAGACATTTAAAA  
GGAGAAGATCTATCATAAACTGGCCTTCTGGCGAGGTTCTAGCACTCACCTGGACAACCTTGCCCTCATC  
GCCAACATCACCTATGCCAGGACAGCTCTTTGGAATTTCTCTGCCAAATATTTGTGAGAATGACAATCTG  
CCCAAACCTGTCTGGATATGCTTTTCTTCTTAATCAAAAAGGACCTCTCACCAAAGGTATCTTCAGGC  
AATCAGCCAATGTGAAATCCTGCAGAGAACTAAAAGAGAAATGAATTCGGAGTCGAAGTACACCTAGA  
CTGTGAATCTATTTTGTGATAGCATCTGTCTAAAGGATTTTCTGCGAAATATTCAGGAAGTATTTTT  
TCATCAGATCTATGATCACTGGTCTCTGTAATGGATCAAGGAAATGATGAAGAGAAAATAAATACTG  
TTCAAAGGCTATTAGACCAGCTCCGAGAGCCAATGTTGTTCTCCTAAGGTATCTTTTTGGGGTGTTACA  
CAACATTGAGCAACATTCCTCATCCAATCAGATGACTGCATTTAATTTAGCTGTGTGTGCTCCAAGT



[View online »](#)

ATTCTTTGGCCTCCTGCTTCTCCAGCCAGAACTAGAAAACGAATTTACAAAAAGGTTTCCCTGCTTA  
TACAATTTCTGATTGAGAATTGCCTTAGGATATTTGGAGAAGAAATCACTTCCCTCTTCAGAGAGTTTC  
AGTGAGATGTGACACTAGAGAGAATGCCTCAGATATTTCTTGCTTCACTGAATGACTCCTCTATGAC  
AGCTTGGAAAAATGAGCTAAATGAGGATGTTGATGCACCATGCAGTGACTTGGTAAAGAACTTGGCCAGG  
GGAGCAGAAGCATGGACTCTGTCTTAACCTCAGTGACTATGATCTTGACCAGCCGAGGTGGAAGGCCT  
TTTAACCTAAGCGACTTTGACTTGGCCATTCTAAAGATGAAGATGTTCAAATGAAACGGCCTCTTGAA  
TCCAAGCCGGTGAACATTTTAGTGTACACAAAGATCCCCTGCGGGATCATGCCAGGGCCCCATCGCCA  
TGTGCACACCCAGCTACCTGTCCACAGCTGCAGCAAATGCTGCAAAAAGCCTGAGGCGACACCCGGGTTG  
CTCAGAGCCCAGCATCGACTATCTGATTCAAAGCTTCTACCTCAGGGAGTTTATCAGAAAAAGCTA  
CGCAAGTCCAGCTGTGATGCAATCTTTCTCAAAAAGATGAAGACTATCTGAAGCAGAATCAACCCCTCC  
AGGAGGAAGGAAAGACATGTTTTAAACAGAGTTTAGTCACAGGCACTGATGTCAGCAAGAAAAATGCCAC  
TACTCAAAACACTAAGAAGAAAAGCTTGTCTGGTAGTGAAGGAAATCACGTGAACTTTTCCCTAAGTCT  
AAGCCAGTGGCCATTTCTGTGGCATCTTATAGTCTATGCTCACAGGATCATTCCAAGAACCAGCCCT  
TTGATGTGAATACATCTGGATACTCCCCACCACACACAGCAGATGCCCTCAAGGGTCCAAGGACACATCG  
GGCTGCTCAGAGCCCAACATAGAAGACCAGAACCAGCTGACCTATCTCAGGGGAATTTATTCAAAG  
AAACAACATAAAAACAGCTGTGAAGCTGGTCTCTTGCATGGAGAGGAGGATTATCTCAAACGGCATAAGT  
CTTTGCAATGGAGGGGAGAAGCTCATTAATCAGAGTTTAGTCATGGGGATTGAGGTGGCAAGAGTAG  
TGCCACAAAACAAAACACTGAGAAGTTTTACCCCAAGATTAACCTTTGCCAAGGACCAGCTATTCC  
AGCTTATCCTCCCAGGCACTTCCCAATCCGGCTCATCAGTAAGCTCCAAGACAGTGCTTTTTCTCAGA  
TTTCTGAACACTCTGTGTTTACACCCACTGAGACTTCTCTCCAATAGATTGACTTTTTCAGGCTCAGAG  
AAAACGGGAAGACCTTTCTCTGACTTTAGCAATGCCAGCCATGTTTCCGGAATGCCCGTCCCTCATCA  
GGCAGGCTTGCAGCCGCCAGCCTATACAAAGAAGGACACCATGGAGTGGCATTACAAATGCATTCTG  
TAACTCTTCATCCCAGCACATGGTTGAGAAATGGTGTGGCCAGTTTGAAAACTGGTCCCTCAAAAAGAA  
AGCAAAGGCAGCCAGACCAGAGGAAGAGAAAATAGCTTCTCAAAAAGGACCCTTAGAGCCACCCACAT  
GCTTCTGGTGTTCCAGAAGCCAACTCACTGCAAGAGGAACAAAAAGACTTGCCCTTAAGGGCAGCTGAAG  
GACTGTCCCTGTGCAGTCAGCCAAAAGGTGTAGTTCTTCTCCCTTCCAGGACTCAGAGAGACACTGTAG  
CTCTCCATTCAGCCTGGTGGAGAGCAGACTTAAGCTGTGCATGAAGTCACATGAGGAAATAGAGCCTGGT  
AGTCAGAGCTCTTCTGGTTCTCTGCCTTGGGAAAGAGCCTCAGCCAGCTTTGGACTCTAGAGGATGCGA  
CCAGCCCAGACTCAGGGCTACAGTGGTCTGCGACATTGAGGACAGGTATTTAACCAAAGACATT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG235201 representing NM\_001258416  
Red=Cloning site Green=Tags(s)

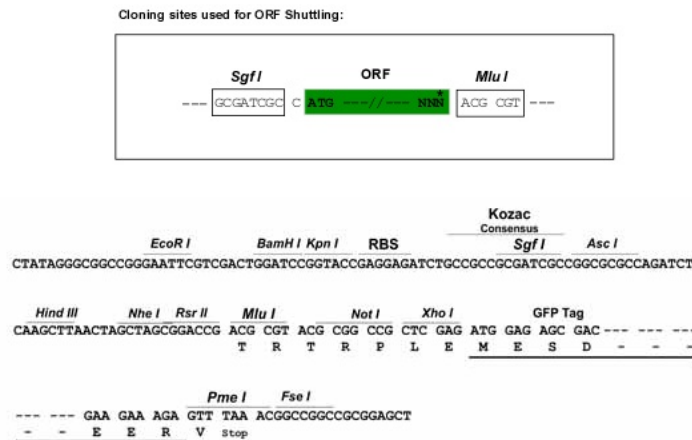
```

MTFWIIINKMKTLAERRRSAPSLILDKALQKRPTTRDSPSASVDTCTFLSSLVCSNRTLLIDGRAELKR
GLQRQERHLFLFNDLFVVAIKIKYNNNFKIKNKIKL TDMWTASCVDEVEGENTNAMKSFVLGWPTVNFVAT
FSSPEQDKWL SLLQRYINLEKEKDYPKSIPLKIFAKDIGNCAYSKITITVMNSDTANEVINSLPMLGIT
GSDYQLWVNSGKEEAPYPLIGHEYPIYGIKMSHLRDSALLTPGSKDSTTPFNLQEPFLMEQLPREMQCQ
FILKPSRLAAAQQLSDSGHKTFKRRRSIINWAFWRGSSTHLDNLPSSPTSPMPGQLFGISLPNICENDNL
PKPVLDMFLFNQKGPLTKGIFRQSANVKSRELKEKLN SGVEVHLDCEIFVIA SVLKDFLRNIPGSIF
SSDLYDHVSVMDQGNDEEKINTVQRLLDQLPRANVLLR YLFGVLHNIEQHSSSNQMTAFNLAVCVAPS
ILWPPASSPELENEFTKKVSLLIQFLIENCLRIFGEEITSLFREVSVRCDTRENASDISCFQLNDSSYD
SLENELNEDVDAPCSDLVKKLGQGRSMDSVL T LSDYDL DQPEVEGLL T L SDFDLAHSKDEDVQMKRPLE
SKPVN I L VYTKIPLRDHARAPSAMCTPSYLSTAAANA AKSLRRHRCSEPSIDYLSKLSYLREFYQKKL
RKSSCDA I L S Q D E D Y L K Q N Q P L Q E E G T C F K Q S L V T G T D V S K K N A T T Q N T K K K S L S G S E G N H V K L F P K S
K P V A I S V A S Y S P M S S Q D H S K N Q P F D V N T S G Y S P P H T A D A L K G P R T H R R C S E P N I E D Q N R K L T Y L R G I Y S K
K Q H K T S C E A G L L H G E E D Y L K R H K S L Q M E G Q K L I N Q S L V M G I E V G K S S A T N Q N T E K V L P P R L N L C P R T S Y S
S L S S P G T S P S G S S V S S Q D S A F S Q I S E H S V F T P T E T S S P I D C T F Q A Q R K R E D L S P D F S N A S H V S G M P G P S S
G Q A C S R P A Y T K K D T M E W H S Q M H S V T L H P S T W L R N G V A S L K N W S L K K A K A A R P E E E K I A S P K G P L E P P P H
A S G V P E A N S L Q E E Q K D L P L R A A E G L S P V Q S A Q R C S S S P F Q D S E R H C S S P F S L V E S R L K L C M K S H E E I E P G
S Q S S S G S L P W E R A S A S S W T L E D A T S P D S G P T V V C D I E D R Y L T K D I
    
```

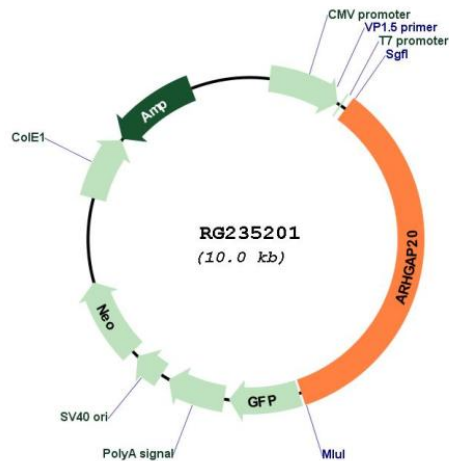
TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



## Plasmid Map:



ACCN: NM\_001258416

ORF Size: 3495 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\\_001258416.1](#), [NP\\_001245345.1](#)

RefSeq Size: 6085 bp

RefSeq ORF: 3498 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]