

Product datasheet for **RR201428**

Arhgap45 (NM_001108067) Rat Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Arhgap45 (NM_001108067) Rat Tagged ORF Clone
Tag: Myc-DDK
Symbol: Arhgap45
Synonyms: Hmha1; RGD1308662
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RR201428 representing NM_001108067
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGGATCGCC

ATGTTCTCTCGGAAGAAGCGAGAAGCTTATGAAAACCTCCCTCTATTTCCAAAAGAACCAGCGCGGGGAGCC
 CCAACCCGCGAGTCTCTCAGGGGAGCTGCCTCGGAAAGACTGTACAGAACTCTAGCCTGGAGCCACC
 AGCCATGTCCCTGTCCACGGTGGCCAAGGGCACAGGAACACTCAAAGGCCAACCAGCCTGAGCCGCCAT
 GCCAGCGCTGCAGGCTTCCCACTCTCGGGCACTGCCACACGGACTCTGGGCCGTGGATATCGAAGCCCC
 TCTCTGCTGCCAGCCCCGAGAGCTACCACTGAGGGACCTTTCCCTGACGGTGTAGAAGACATCTCAAC
 CCTGCTGGCTGATGTTGCCCGCTTTGCTGAGGGCTTGGAGAAGCTCAAGGAGTTTGTGCTGCGGGATGAT
 CTCCTTGAGGCCCGCCGCCCTGGCTCATGAATGCCTGGGTGAAGCTCTGCGAGTATGCGTCAGGTCA
 TCTCAAATACCACTCCTGAACACCGTGGAGACACTCACAGCTGCTGGTACACTCATTGCCAAGGTCAA
 AGCCTTTCATTATGAATGCAACAATGAATCAGATAAGAGGGAGTTTGAAGGCACTGGAGACCATTGCT
 GTGTCCTCAGCTGCACTGTGTCGGAGTTCCTTTGGGTGAAGTGGACAGCAGTACACTCTGGCTGTGC
 CTCGGGGGACCCTAGCCAGTTGGTGGAGAACCTTTATGGGTCAAGTGGAGGAGGAGGAGGAGGAGG
 GGAGGATTGTGAAGAAGGTTGCCTGCCCGAGGAGGTGGACATGCTTCTCAGCGCTGCGAGGGAGGT
 GTGGACGCCGCTGCAATGCAAAAAGACATGGCCAGGTACATGAAGGACCTCATCGGCTACCTGGAGA
 AGAGGACCACCCTGGAGATGGAATTCGCAAAAGGGCTGCAGAAGGTCGTCCATAACTGCAGACAGAACGT
 CACTCATGCGCCCCACATGCCTCTTTATCCATCTACTACTGGCCCTGGAACAAGATCTGGAGTTTGGC
 CACGGCATGGTGCAGGCAGTGGGCACGCTGCAGACCCAGACCTTCATGCAGCCCCGACCTGCGCGGT
 TGGAGCATGAGAGACGCAGGAAGGAGATCAAAGAATCCTGGCATCGTGCAGAGGAAGTGAAGAGGC
 AGAGGCCAACCTGCGCAAGGCTAAACAGGGCTACAACAACGTTGTGAAGACCACGACAAGGCCCGGCTC
 CAGGTGGCCAAGGCTGAGGAGGAACAACAGGGCACAGGGCCAGGAGCAGGACTGCAGCCTCAAGGCC
 TGGACAAGAGGGCGGAGGCTGGAGGAAGAGGCCAAAACAAGGCCGAGGAGGCCATGGCCACTTACCGCAC
 ATGCGTGGCAGATGCAAAGACACAGAAGCAAGAGCTGGAGGACACAAAGTGACTGCGCTGCGACAGATC
 CAGGAGTTCATCAGACAGAGTATCAGACCATTAAGTCGGCCACCATCTCTACTACCAGCTGATGCACA



TGCAGACAGCGCCGCTGCCTGTGAACCTCCAGATGCTGTGCGAGAGCAGCAAATATGACCCGGGCCA
 ACAGTACGCATCTCACGTGCGTCAGCTGCAGCGAGGCGAGGAGCCGGATGTGCGTACGACTTTGAGCCT
 TATGTCTCCACCAATGCCTGGTCCCAATCATGCGAACACGGAAGGGCAGCTTCAATCCTGGTGACGCTT
 CAGGACCCGAAGCTGCCGGCAGTCCCCGGAGGAAGGTGGCACGTCTGAGGGGGCTCCCAACAAGGACCA
 CAGGGGGGACAGGTCATCAGGTACATAAGTCTGGCCTATCTCCATCTCAGACACCGAAGTCAGCCTG
 GACGTGACGTCAGGGGACTTGAAGAAGTTCGATCGAACCTCGTCCAGCGGGACCATGTCATCCAATGAGG
 AGCTGTAGATCAGGAAGCTGGCTTGGTCGCCTCCGCTTTTATTGATTCAGCTGACCTCAATGGCATGGATCC
 CGAGTTACCTGTTGCCATGCCAGTGGACCCTTCCGCCATGTGGGATTGTCCAAGGCAGCCGCACACAC
 CGACTTCGCAAGCTGCGAACGCCGGCCAAGTGCAGAGAGTGAACAGCTACGTGTACTTCCAAGGGGCCG
 AATGTGAAGAGTGTCTGCTGGCTTGTCAAAAAAGTGTGGAGACCCTGGCTATCCAGTGTGGTCAAAA
 GAAGCTTCAGGGCCGCTGCAGCTGTTGGTCAAGACTTCAGCCAGGCAGCCACAGCACCCCTGATGGG
 GTGCCCTTATTATAAAAAGTGTGTCTGTGAGATTGAGCGCGGGGACTGCACACTAAGGGGATCTACC
 GGGTCAACGGCGTGAAAACGCGTGTGGAGAAGCTGTGCCAGGCCCTTGAAGTGGCAAAGAGCTGGTGA
 GTTGTACAGGCCTCACGCACGACATAAGCAATGTCTGAAGCTGTACCTACGCAGCTGCCGGAGCCC
 CTCATCTTTTTCGCTTCTACCATGAGCTGGTGGGATTAGCTAAGGACAGCCTAAAGGCAGAGGCCGAAG
 CCAAGGCAGAACCCGGGGCCGCGAGGACGGTCCGAGAGTGAAGCTGCGACCTTGGCCATGGTGGGCCG
 CCTGCGAGAGCTCATGCGGGACCTGCCAGCCGAAAACCGGGCCCACTCTTATACCTGCTGAGGCACCTG
 CGAAGGATCGTGGAAATGGAGCAAGATAACAAGATGACCCCGGGAACCTGGGCATCGTTTTCGGGCCCA
 CACTGTGCGGCCTCGGCCACAGACGCCACCGTGTCCCTCTTCTCTGGTGGACTACCCACCAGGC
 CCGTGTATTGAGACTCTGATTGTCCACTATGGCCTGGTCTTTGAGGAGGAGCCAGAAGAAGCAGCTGGC
 AGCCAAGAGGGGGCGTCCGCCAGTGTGCCAGCTGGAGACTGCTGAGGGCATTGTCTTCCCCAGCAGG
 AGGAGGGGACGATGAAAACCGAGAATCCAGGTGGCATCCAATGACTCAGACTCAGAGCTGGAAGAGGC
 TTCTGACTCCTTTCGTCTCGACGCCAGCCCTGCACCCCTCAGTTTCTGGAGCAGCCAGGAGCA
 GGCTTGGAGGAAGGTCCCAGAGCCACAGTGGCAGTGAAGAACAGCTGGAGAGTGAAGTGCAGCCCCAG
 GCCATCAGCTGTCTTCAACACCAACCAGTCCAACACACCACACAAGCCTCTGCCCACCATGCG
 ACTCCGAGATGGGCAGATCACAGGTGGCAGCGGTGGAAAGCGGCAGCCACAGTTTGTACTCCGAGATGG
 GCAGATCACAGGTGGCAGCGGTGGAAAGCGGCAGCCACAGTTTGTCT

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR201428 representing NM_001108067
 Red=Cloning site Green=Tags(s)

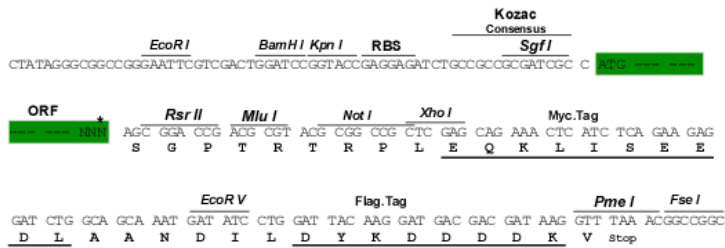
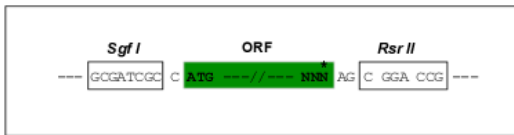
MFSRKKRELMKTPSISKKNRAGSPNPQSSSGELPRKDCETEPSLEPPAMSLSTVAKGTGLKRPTSLSRH
 ASAAGFPLSGTATRTLGRGYRSPLSAASPAELTEGPFDPGVEDISTLLADVARFAEGLEKLKEFVLRDD
 LLEARRPLAHECLGEALRVMRQVISKYPLLNTVETLTAAGTLIAKVKAHYECNNESDKREFEKALETIA
 VSFCTVSEFLLGEVDSSTLLAVPPGDPSQLVENLYGSGSEGGPPHSVEDCEEGLPPEEVDMLLRQCEGG
 VDAALQYAKDMARYMKDLIGYLEKRTTLEMEFAKGLQKVHNCRQNVTHAPHMPLLSIYSLALEQDLEFG
 HGMVQAVGTLQTQTFMQPLTLRLEHERRRKEIKESWHRAQRKLQEAEANLRKAKQGYKQRCEHDHDKARL
 QVAKAEEEEQQTGPGAGTAASKALDKRRRLEEEAKNKAEEAMATYRTCVAADAKTQKQLEEDTKVTLRQI
 QEVIRQSDQTIKSATISYYQLMHMQTAPLPVNFQMLCESSKLYDPGQYASHVRQLQRGEEDPVRVDFEP
 YVSTNAWSPIMRTRKGSFNPGDASGPEAAGSPPEEGGTSEGAPNKDHRGGRGHQVHKSWPISISDTEVSL
 DVSSGDLKKFDRTSSSGTMSSNEELVDQEAGLVAFAFDSADLNGMDPELVPAMPSPFRHVGLSKAARTH
 RLRLKLRTPAKCRECNSYVYFQGAEECECLACHKKCLETLAIQCCHKLQGRLLQFQDFSQAAHSTPDG
 VPFIIKKCVCEIERRALHTKGIYRVNGVKTREKLCQAFENGKELVELSQASPHDISNVLKLYLRQLPEP
 LISFRFYHELVLAKDSLKAEAEAKAASRGRQDGESEEAATLAMVGRLELMDLPAENRATLLYLLRHL
 RRIVEMEQDNKMTPGNLGIVFGPTLLRPRPTDATVSLSSLVDYPHQARVETLIVHYGLVFEFEEEAAG
 SQEGASQAQLETAEGIVFPQQEEADDGNRESQVASNDSSELEEEASDLLSSSDASALHRLSFLEQTEA
 GLEEGPQSHSGSEEQLESEDAAPGHQLCSFNNTQSNNTTQASLPTMRLRDGQITGGSGRKRQPFVTPRW
 ADHRWQRSEAAATVC

SGPTRTRPLEQKLI SEEDLAANDILDYKDDDDKV

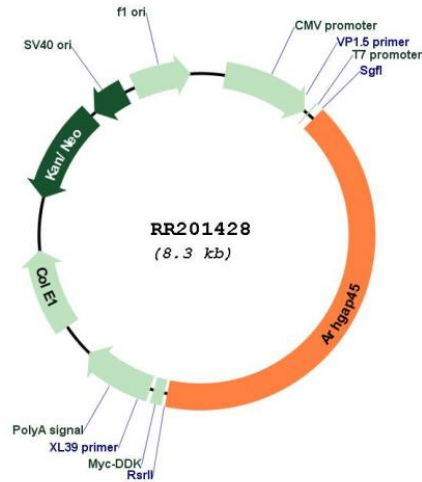
Restriction Sites: SgfI-RsrII

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_001108067

ORF Size: 3348 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 Size: 3891 bp

RefSeq ORF: 3351 bp

Locus ID: 314618

Cytogenetics: 7q11

MW: 123.1 kDa