

Product datasheet for **RC216597**

ARHGAP10 (NM_024605) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ARHGAP10 (NM_024605) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ARHGAP10
Synonyms:	GRAF2; PS-GAP; PSGAP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RC216597 representing NM_024605
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGGGCTGCAGCCCCTGGAGTTCAGCGACTGCTACCTCGACAGCCCGTGGTTCGGGAGAGGATCCGGC
CTCACGAAGCGGAACCTCGAGAGGACCAACAAGTTCATCAAAGAGCTCATTAAAGGACGGGAAGAACCCTCAT
CGCTGCGACGAAAAGTCTGTCACTGGCCACGGGAAGTTTGTCTATTCACTCAGAGACTTTAAGTTTGAG
TTTATCGGTGATGCTGTGACAGATGATGAACGATGCATAGATGCTTCCTTACGTGAATTTCAAATTTTT
TGAAGAATCTGGAGGAACAGAGAGAAATATGGCATTAAAGTGAAGTAAACCCCTGATTAACCCCTGGA
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CAAGGACCACAAAACGAGCAAGTCAGTTTACAGCCGAAGGCTACCTGTATGTCAGGAAAAAGGCCCTGCT
CCGTTTGGTCCAGTTGGGTCAAACACTATTGCATGTATCGAAAAGCAGCAAGAAGTTCAACATGATCC
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GCATACTGACTCCATTGACAGAAGGTTTTGTTTTGACATAGAAGCTGTGATCGGCCTGGCGTTTCCCTG
ACCATGCAGGCATTTCCGAAGAGGAAAGGAAGCAGTGGTTGGAAGCTCTGGGTGGAAGGAAGCTCTGT
CCCATAGTTTTAATACAGCCATCATCCCAAGACCAGAAGGAAATGCACAGTTGGATAAGATGGGGTTAC
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GGGTGAGTTCAAAGGTCAGAGACTTCTGAGTATGTTGATGGATGTA AAAACATGCAATGAGGTGAGCC
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TGAAACACTTAACAAATGTTTCAAATCACTCCAAGCAGAACTGATGACTGTGGCAAACTTAGGAGTGGT
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AGCCACCTGCCTGTGAGCATCACCCCAAATGCGCCACCAAGGAGTGAAGAGACAAGGCCAGAGAAC
CAAGAGGCCCGTGGCCGTCTACAATCTTTGCTGGAGCTGGAAGATGGTGACAATCCTTACCCCTTCAAAG
GAGGACACCCCTACCAGCAGTCTGGACTCACTTCTCCCGTCTCCCGTACTACAGCTGTCCCTGGGC
CTCCTGGACCAGACAAAACCACTTCTGGCAGATGGAGGGAGCTTTGGAGACTGGGCATCCACTATCCC
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GCTGTGACACCTTTTCAACCCGGTCTGCTCCCTTTCCCTTTTCTCCTCTGCTACTGTAGCGGACAAGC
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ATCTTTTGAATAGGAGCAATTTTTGAGGATGTACAACTCCAGGGAACCTGGCTGGCTAGAAGGGACT
CTGAACGGCAAGAGGGGCTGATTCCACAGAACTACGTCAAGCTGCTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC216597 representing NM_024605
Red=Cloning site Green=Tags(s)

MGLQPLEFSDCYLDSPWFRERIRAHEAELERTNKFIKELIKDGNLIAATKSLSVAQRKFAHSLRDFKFE
FIGDAVTDDERCIDASLREFSNFLKNLEEQREIMALSVTETLIKPLEKFRKEQLGAVKEEKKKFDKETEK
NYSLIDKHLNLSAKKKDShLQEADIQVEQNRQHFYELSLEYVCKLQEIQRKKKFEFVEPMLSFFQGMFTF
YHQGHELAKDFNHYKMELQINIQNTRNRFEGTRSEVEELMNKIRQNPKDHKRASQFTAEGYLYVQEKRPA
PFGSSWVKHYCMYRKAACKFNMIPEHRSGGKLGDEVFVFLKECTKRHTSIDRRFCFDIEAADRPGVSL
TMQAFSEEERKQWLEALGGKEALSFSFNTAIIPRPEGNAQLDKMGFTIIRKCSAVETRGINDDQGLYRVV
GVSSKVQRLLSMLMDVKTCEVDLENSADWEVKTITSALKQYLRSLEPLMTYELHGDFIVPAKSGSPES
RVNAIHFLVHKLPEKNKEMLDILVKHLTNVSNHSKQNLMTVANLGVVFGPTLMRPQEETVAALMDLKFQN
IVVEIL IENHEKIFRTPDPTTFPEPTCL SASPPNAPPRQSKRQGQRTKRPVAVYNLCLELEDGDNPPYPSK
EDTPTSSLDLSSPSVTTAVPGPPGPDKNHLLADGGSFGDWASTIPGQTRSSMVQWLNPPQSPTTSSNS
AVTPLSPGSSPFPFSPATVADKPPESIRSRKARAVYPCAEHSSSELSFEIGAI FEDVQTSREPGWLEGT
LNGKRGLIPQNYVKLL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8115_f01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:


ACCN: NM_024605

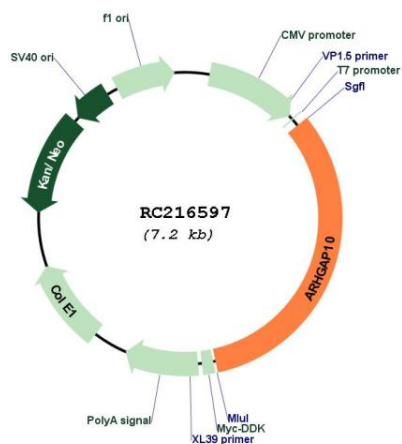
ORF Size: 2358 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

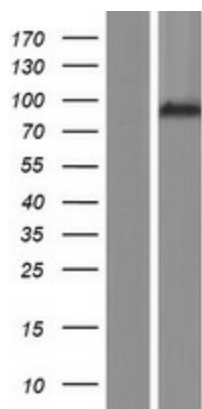
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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:	<ol style="list-style-type: none">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_024605.4
RefSeq Size:	3073 bp
RefSeq ORF:	2361 bp
Locus ID:	79658
UniProt ID:	A1A4S6
Cytogenetics:	4q31.23
Domains:	SH3
MW:	89.2 kDa
Gene Summary:	GTPase activator for the small GTPases RhoA and Cdc42 by converting them to an inactive GDP-bound state. Essential for PTKB2 regulation of cytoskeletal organization via Rho family GTPases. Inhibits PAK2 proteolytic fragment PAK-2p34 kinase activity and changes its localization from the nucleus to the perinuclear region. Stabilizes PAK-2p34 thereby increasing stimulation of cell death (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC216597



Western blot validation of overexpression lysate (Cat# [LY411197]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216597 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).