

Product datasheet for **RC205498**

RASGEF1A (NM_145313) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RASGEF1A (NM_145313) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RASGEF1A
Synonyms:	CG4853
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC205498 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGC**C

ATGCCGCAGACGTCCGTTGTCTTCTCCAGCATCCTTGGGCCAGCTGTAGCGGACAGGTGCAGCCTGGCA
 TGGGGGAGCGTGGAGGCGGGCCGGTGGCGGCTCCGGGGACCTCATCTTCCAAGATGGACACCTCATCTC
 TGGGTCCCTGGAGGCCCTGATGGAGCACCTTGTCCACGGTGGACTATTACCCGATAGGACGTACATC
 TTCACCTTTCTCCTGAGCTCCCGGGTCTTTATGCCCCCTCATGACCTGCTGGCCCGCTGGGGCAGATCT
 GCGTGGAGCAGAAGCAGCAGCTGGAAGCCGGGCTGAAAAGGCCAAGCTGAAGTCTTTCTCAGCCAAGAT
 CGTGCAGCTCCTGAAGGAGTGGACCGAGGCCTTCCCCTATGACTTCCAGGATGAGAAGGCCATTGCCGAG
 CTGAAAGCCATCACACACCGTGTACCCAGTGTGATGAGGAGAATGGACAGTGAAGAAGGCCATTGCCGAG
 AGATGACACAGAGCCTGTTGCTGCTTGGCTGCCCGGAGCCAGCTCCAGGAAGTCCGAGAGAAGCTCCG
 GCCACCGCTGTAGACAAGGGGCCATCCTCAAGACCAAGCCACCAGCCGCCAGAAGGACATCCTGGGC
 GTGTGCTGCGACCCCTGGTGTGGCCAGCAGCTGACTCACATTGAGCTGGACAGGGTCAGCAGCATTT
 ACCCTGAGGACTTGATGCAGATCGTCAGCCACATGGACTCATTGGACAACCACAGGTGCCGAGGGGACCT
 GACCAAGACCTACAGCCTGGAGGCCTATGACAAGTGGTTCAACTGCCTGAGCATGCTGGTGGCCACTGAG
 GTGTGCCGGTGGTGAAGAAGAAACACCGGACCCGCATGTTGGAGTTCTTCATTGATGTGGCCCGGAGT
 GCTTCAACATCGGGAAGTTCAACTCCATGATGGCCATCATCTCTGGCATGAACCTCAGTCTGTGGCAAG
 GCTGAAGAAAAGTTGGTCCAAGGTCAAGACAGCAAGTTTGTGTTGGAGCATCATGAGACCGGTCC
 AGCAACTTCTGCAACTACCGTACAGCCCTGCAGGGGGCCACGAGAGTCCAGATGGCCAACAGCAGCC
 GTGAAAAGATCGTCATCCCTGTGTTCAACTCTTCGTTAAGGACATCTACTTCTGCACAAAATCCATAC
 CAACCACCTGCCCAACGGGCACATTAACCTTTAAGAAATTCTGGGAGATCTCCAGACAGATCCATGAGTTC
 ATGACATGGACACAGGTAGAGTGTCTTTTCGAGAAGGACAAGAAGATTACAGATTACCTGCTCACGGCGC
 CCATCTACAGCGAGGAAGCTCTCTTCGTCGCTCCTTTGAAAGTGAGGGTCCCGAGAACCACGTGAAAAA
 AGACAGCTGGAAGACCCTCAGGACCACCCTTCTGAACAGAGCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC205498 protein sequence
 Red=Cloning site Green=Tags(s)

MPQTSVVFSSILGPSCSGVQPGMGERGGGAGGSGDLIFQDGHLSGSLEALMEHLVPTVDYYPDRYI
 FTFLSSRVFMPPHLLARVGQICVEQKQLEAGPEKAKLSFSKIVQLLEWTEAFPYDFQDEKAMAE
 LKAITHRVQTCDEENGTVKKAIAQMTQSLLLSLAARSQLELREKLRPAPVDKGPILKTKPPAAQKDILG
 VCCDPLVLAQQLTHIELDRVSSIYPEDLMQIVSHMDSLNDHRCRGDLTKTYSLEYDWNFNCLSMVATE
 VCRVVKKKHRTRMLEFFIDVARECFNIGNFNSMMAIISGMNLSVARLKKTWSKVKTAKFDVLEHMDPS
 SNFCNYRTALQGATQRSQMANSSREKIVPVFNLFVKDIYFLHKIHTNHLNPGHINFKKFWEISRQIHEF
 MTWTQVECPFEKDKKIQSYLLTAPIYSEALFVASFESEGPENHVEKDSWKTLLRTLLNRA

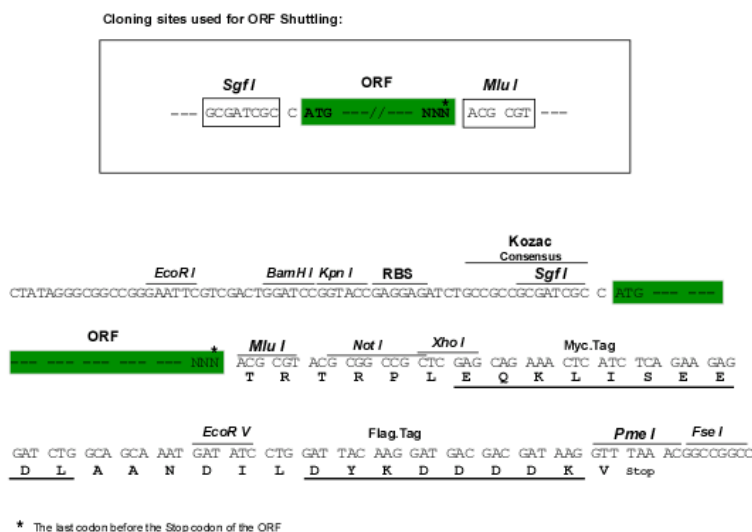
TRTRPLE**QKL**ISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6313_d07.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_145313

ORF Size: 1443 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_145313.4](#)

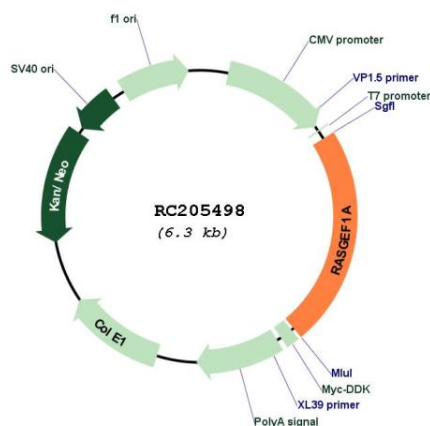
RefSeq Size: 3243 bp

RefSeq ORF: 1446 bp

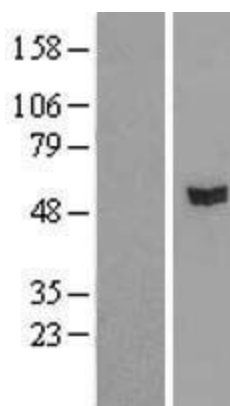
Locus ID: 221002

UniProt ID: [Q8N9B8](#)
Cytogenetics: 10q11.21
MW: 54.5 kDa
Gene Summary: Guanine nucleotide exchange factor (GEF) with specificity for RAP2A, KRAS, HRAS, and NRAS (in vitro). Plays a role in cell migration.[UniProtKB/Swiss-Prot Function]

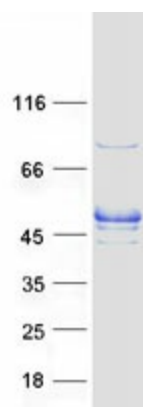
Product images:



Circular map for RC205498



Western blot validation of overexpression lysate (Cat# [LY407960]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205498 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RASGEF1A protein (Cat# [TP305498]). The protein was produced from HEK293T cells transfected with RASGEF1A cDNA clone (Cat# RC205498) using MegaTran 2.0 (Cat# [TT210002]).