

Product datasheet for **RG229024**

RAGEF2 (RAPGEF6) (NM_001164390) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RAGEF2 (RAPGEF6) (NM_001164390) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	RAGEF2
Synonyms:	KIA001LB; PDZ-GEF2; PDZGEF2; RA-GEF-2; RAGEF2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide
Sequence:**

>RG229024 representing NM_001164390
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAACACCCGTGGACCTGGCGCTAGGCAGGCGTTGAGGAAGAAGCCACCCGAGCGGACTCCCAGG
 ACTTAAATACTATTTATTCTTATCTTCATGGAATGGAAATATTATCAAATCTCAGGGAACATCAGCTTAG
 ATTGATGTCTGCAAGAGCACGCTATGAGAGATACAGTGGCAATCAGGTTCTCTTTTGTTCAGAAACGATT
 GCCAGATGTTGGTATATCCTACTTTCTGGATCTGTGCTTGTGAAAGGCTCCATGGTCTTGCTCTTGCA
 GTTTTGGTAAGCAGTTTGGAGGAAAAAGAGGATGTGATTGTCTTGATTAGAGCCTTCAGAAATGATTGT
 GGTAGAGAATGCCAAAGATAATGAAGATAGTATTCTACAAAGAGAAATCCTGCCAGACAATCCGAAGA
 AGATTTTCGGAATTAATAAAGGAGAGCGCCAAACAATTACTGATGATGTGGAGGTTAACAGCTATC
 TTTCTCTCCAGCTGATCTTACCAAGATGCATCTCACAGAAAACCCTCATCCACAGGTGACTCATGTGTC
 TTCTAGTCAGTCTGGTTGTAGCATTGCCAGTGACTCTGGAAGCAGCAGTTTATCTGATATCTATCAGGCT
 ACGGAGAGTGAGGTAGGAGATGTAGATTTGACACGTCTTCCAGAAGGACCTGTTGATTCTGAGGATTGACG
 AAGAGGAAGATGAAGAGATTGATCGAACAGATCCATTGCAGGGGCGAGATCTTGTTTCGAGAAATGTCTTGA
 AAAAGAACCTGCAGACAAAATGATGATGACATTGAACAATTGCTGGAGTTTATGCACCAGCTCCCTGCA
 TTTGCAACATGACCATGTCTGTAAGGAGAGAATCTGCTCAGTGATGATTTTGAAGTGGTAGAGCAGG
 CTGGAGCTATTATTCTGAAGATGGGCAAGAGCTTGACTCATGGTATGTTATTTAAACGGCACTGTGGA
 AATCAGTCATCCAGATGGAAAAGTTGAAATTTGTTTATGGGAAATAGTTTGAATTAATCCCCTCTG
 GATAAGCAGTACATGCATGGAATTGTGAGGACTAAAGTAGATGATTGTCAGTTTGTCTGCATAGCCAGC
 AAGATTATTGGAGAATTTAAACCATGTGGAAGAAAAATACCCATAAAGTTGAGGAAGAGGGAGAAATTGT
 TATGGTACATGAGCATCGGGAATAGACCGGAGTGGAACCAAGGAAAGGACACATTGTGATCAAGGCAACA
 CCTGAGCGTCTCATAATGCATTTAATAGAAGAACATTCCATCGTGGATCCAACTTATATAGAAGATTTTC
 TATTAACCTACAGGACATTTCTTGAAAGTCCTTTGGATGTTGGGATCAAATATTGGAATGGTTTAAAGAT
 CGACAGCTTAAGAGATAAGGTGACACGGATTGTATTATTATGGGTAAATAATCATTTTAAATGATTTTGA
 GGTGACCTGCTATGACTCGATTTCTAGAGGAATTTGAAAAAATCTGGAAGATACAAAGATGAATGGTC
 ATCTCCGGTTATTGAATATTGCCTGTGCTGCAAGGCTAAGTGGAGACAGGTTGTGCTGCAAAAGGCTTC
 CCGCGAGTCCCCTCTACAATTCAGCCTTAATGGAGGGAGTGAGAAGGGATTGGTATTTTGTGTAAGGA
 GTAGAACCTGGTAGCAAAGCTGCTGATTGAGGACTGAAACGTGGTGATCAGATTATGGAAGTAAATGGAC
 AAAACTTTGAGAATATTACATTTATGAAAGCCGTTGAAATTTTGAGGAATAATACTCATCTTGCACTTAC
 TGTGAAGACCAACATTTTGTGTTCAAAGAGTTACTTTTTAGGACTGAACAAGAGAAATCTGGTGTTCCT
 CATATTTCCAAAATTTGCTGAAAAAAAAGTAATCGCCATTCTATCCAGCATGTGCCAGGAGATATTGAAC
 AGACATCACAGGAGAAAGGAAGTAAGAAAGTTAAAGCAAACTACTGTTTCAGGTGGAAGAAACAAAATCAG
 GAAGATTTTGGATAAAACACGATTTAGTATCTTGCCTCCAAAGCTATTTAGTGATGGAGGCTAAGCCAA
 TCACAAGATGACAGCATTGTGGGAACAAGGCACTGTAGGCATAGTCTGGCTATAATGCCATCCCTGGAA
 CACTCTCATCCAGCAGCCCTGATCTCTGCAGCCTACCACAGTATGTTGGATTTTCCAATCCTTCAGA
 TATCGCTGATCAAGTTATAAGAGTTTCAAAGTGGATCAGCAAAGTTGCTACATTATCATCAGTAAAGAC
 ACCACAGCTAAAGAAGTAGTTTTTCATGCTGTTTATGAATTTGGTTTGACCGGTGCATCCGACACATATT
 CTCTCTGTGAAGTTTCTGTTACTCCTGAGGTTGTCATAAAACAGAGAAGACTTCCAGATCAGTTCTCCAA
 ATTAGCTGATAGAATTCAACTCAATGGAAGG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG229024 representing NM_001164390
 Red=Cloning site Green=Tags(s)

MNSPVDPGARQALRKKPPERTPEDLNTIYSYLHGMEILSNLREHQLRLMSARARYERYSGNQVLCSETI
 ARCWYILLSGSVLVKGSMLPPCSFGKQFGGKRGCDCLVLEPSEMIVVENAKDNEDSILQREIPARQSRR
 RFRKINYKGERQTITDDDEVNSYLSLPADLTkmHLTENPHPQVTHVSSSQSGCSIASDSGSSSLSDIYQA
 TESEVGDVDLTRLPEGPVDEDEDEEEDRDTPLQGRDLVRECLEKEPADKTDDIEQLLEFMHQLPA
 FANMTMSVRRELCSVMIFEVVEQAGAIILEDGQELDSWYVILNGTVEISHPDGKVENLFMGNSFGITPTL
 DKQYMHGIVRTKVDDCQFVCIAQQDYWRILNHVEKNTHKVEEEGEIVMVHEHRELDMSGTRKGHIVIKAT
 PERLIMHLIEEHSIVDPTYIEDFLLTYRTFLESPLDVGIKLEWFKIDSLRDKVTRIVLLWNNHFNDFE
 GDPAMTRFLEEFKNEEDTKMNGHLRLNIACAAKAKWRQVVLQKASRESPLQFSLNGGSEKGFIFVEG
 VEPGSKAADSGLKRGDQIMEVNGQNFENITFMKAVEILRNTHLALTvKTNIFVFKELLFRTEQEKSGVP
 HIPKIAEKKSNRHSIQHVPGDIEQTSQEKGSKKVKANTVSGGRNKIRKILDKTRFSILPPKLFSDGGLSQ
 SQDDSIQVTRHCRHSLAIMPPIGTLSSSSPDLLQPTTSMDFSNPSDIADQVIRVFKVDQQSCYIIISKD
 TTAKEVVFHAVHEFGLTGASDTYSLCEVSVTPEGVIKQRRLPDQFSKLADRIQLNGR

TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN:	NM_001164390
ORF Size:	2481 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_001164390.1](#), [NP_001157862.1](#)

RefSeq Size: 3127 bp

RefSeq ORF: 2484 bp

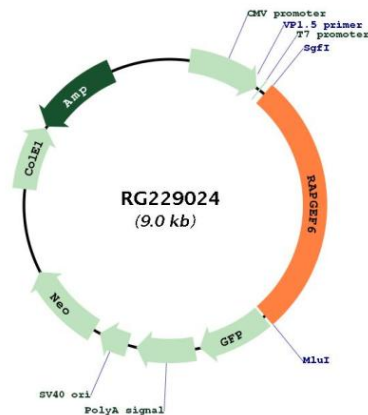
Locus ID: 51735

UniProt ID: [Q8TEU7](#)

Cytogenetics: 5q31.1

Gene Summary: Guanine nucleotide exchange factor (GEF) for Rap1A, Rap2A and M-Ras GTPases. Does not interact with cAMP.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG229024