

Product datasheet for **RG226046**

RACGAP1 (NM_001126104) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RACGAP1 (NM_001126104) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	RACGAP1
Synonyms:	CYK4; HsCYK-4; ID-GAP; MgcRacGAP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG226046 representing NM_001126104
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGATACTATGATGCTGAATGTGCGGAATCTGTTTGTAGCAGCTTGTGCGCCGGGTGGAGATTCTCAGTG
 AAGGAAATGAAGTCCAATTTATCCAGTTGGCGAAGGACTTTGAGGATTTCCGTAAAAAGTGGCAGAGGAC
 TGACCATGAGCTGGGAAATACAAGGATCTTTTGTGAAAGCAGAGACTGAGCGAAGTGCTCGGATGTT
 AAGCTGAAGCATGCACGTAATCAGGTGGATGTAGAGATCAAACGGAGACAGAGAGCTGAGGCTGACTGCG
 AAAAGCTGGAACGACAGATTGAGCTGATTCGAGAGATGCTCATGTGTGACACATCTGGCAGCATTCAACT
 AAGCGAGGAGCAAAAATCAGCTCTGGCTTTTCTCAACAGAGGCCAACCATCCAGCAGCAATGCTGGGAAC
 AAAAGACTATCAACCATTGATGAATCTGGTTCATTTTATCAGATATCAGCTTTGACAAGACTGATGAAT
 CACTGGATTGGGACTCTTCTTTGGTGAAGACTTTCAAACGAAGAAGAGAGAAAAGAGGCGCTCTACTAG
 CCGACAGTTTGTGATGGTCCCCCTGGACCTGTAAGAAAACCTGTTCCATTGGCTCTGCAGTAGACCAG
 GGAATGAATCCATAGTTGCAAAAACACTACAGTACTGTTCCCAATGATGGCGGGCCCATCGAAGCTGTGT
 CCACTATTGAGACTGTGCCATATTGGACCAGGAGCCGAAGGAAAACAGGTAATTTACAACCTTGGAACAG
 TGACTCCACCCTGAACAGCAGGCAGCTGGAGCCAGAAGTGTGAGACAGACAGTGTGGGCACGCCACAGAGT
 AATGGAGGGATGCGCCTGCATGACTTTGTTTCTAAGACGGTTATTAACCTGAATCCTGTGTTCCATGTG
 GAAAGCGGATAAAATTTGGCAAATATCTCTGAAGTGTGAGACTGTGCGTGTGGTCTCTCATCCAGAATG
 TCGGGACCGCTGTCCCCTCCCTGCATTCTACCTGATAGGAACACCTGTCAAGATTGGAGAGGGAATG
 CTGGCAGACTTTGTGCTCCAGACTTCTCCAATGATCCCCTCCATTGTTGTGCATTGTGTAATGAGATTG
 AGCAAAGAGGCTGACTGAGACAGGCTGTATAGGATCTCTGGCTGTGACCGCACAGTAAAAGAGCTGAA
 AGAGAAAATTCCTCAGAGTGAAGAACTGTACCCCTCCTCAGCAAAGTGGATGATATCCATGCTATCTGTAGC
 CTCTAAAAGACTTTCTCGAAACCTCAAAGAACCCTCTCTGACCTTTTCGCTTAACAGAGCCTTTATGG
 AAGCAGCAGAAATCACAGATGAAGACAACAGCATAGCTGCCATGTACCAAGCTGTTGGTGAAGTGCCTCA
 GGCCAACAGGGACACATTAGCTTTCCTCATGATCACTTGCAGAGAGTGGCTCAGAGTCCACATACTAA
 ATGGATGTTGCCAATCTGGCTAAAGTCTTTGGCCCTACAATAGTGGCCATGCTGTGCCCAATCCAGACC
 CAGTGACAATGTTACAGGACATCAAGCGTCAACCAAGGTGGTTGAGCGCCTGCTTTCCTGCTCTGGA
 GTATTGGAGTCAAGTTCATGATGGTGGAGCAAGAGAACATTGACCCCTACATGTCATTGAAAACCTCAAT
 GCCTTTTCAACACCACAGACACCAGATATTAAGTGAAGTTTACTGGGACCTGTGACCACTCTGAACATC
 AGCTTCTCAAGACTCCTTCATCTAGTCCCTGTACAGAGAGTCCGTTCCACCCTACCAAGAACACTCC
 TAGATTTGGGAGCAAAAGCAAGTCTGCCACTAACCTAGGACGACAAGGCAACTTTTTTGTCTCTCCAATG
 CTAAG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG226046 representing NM_001126104
 Red=Cloning site Green=Tags(s)

MDTMMLNVRNLFELVRRVEILSEGNEVQFIQLAKDFEDFRKKWQRTDHELKGYKDLLMKAETERSALDV
 KLKHARNQVDVEIKRRQRAEADCEKLERIQIQLIREMLMCDTSGSIQLSEEQKSALAFLNRGQPSSSNAGN
 KRLSTIDESGSIILSDISFDKTDSELDWSSLVKTFKLLKREKRRSTRQFVDGPPGPVKKTRSIGSAVDQ
 GNEISIVAKTTVTVPNDGGPIEAVSTIETVPYWTRSRRKGTLPWNDSSTLNSRQLEPRTE TDSVGT PQS
 NGMRLHDFVSKTVIKPESCVPCGKRIKFGKLSLKCRDCRVVSHPECRDRCLPCIPTLIGTPVKIGEGM
 LADFVSQTSMPMIPSIIVHVCVNEIEQRGLTETGLYRISGCDRTVKELKEKFLRVKTVPLLSKVDDIHAICS
 LLKDFLRNLKEPLLTFRLNRAFMEAAEITDEDNSIAAMYQAVGELPQANRDTLAFMIHLQRVAQSPHTK
 MDVANLAKVFGPTIVAHAVPNPDPVTMLQDIKRPKVVERLLSLPLEYWSQFMMVQEINIDPLHVIENS
 AFSTPQTPDIKVSLLGPVTTPEHQLLKTPSSSSLSQRVRSSTLTKNTPRFGSKSKSATNLGRQGNFFASPM
 LK

TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



ACCN: NM_001126104

ORF Size: 1896 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_001126104.3](#)

RefSeq Size: 3206 bp

RefSeq ORF: 1899 bp

Locus ID: 29127

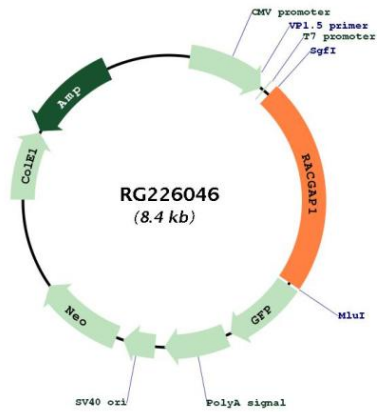
UniProt ID: [Q9H0H5](#)

Cytogenetics: 12q13.12

Protein Families: Druggable Genome

Gene Summary: This gene encodes a GTPase-activating protein (GAP) that is a component of the centralspindlin complex. This protein binds activated forms of Rho GTPases and stimulates GTP hydrolysis, which results in negative regulation of Rho-mediated signals. This protein plays a regulatory role in cytokinesis, cell growth, and differentiation. Alternatively spliced transcript variants have been found for this gene. There is a pseudogene for this gene on chromosome 12. [provided by RefSeq, Feb 2016]

Product images:



Circular map for RG226046