

Product datasheet for **RG224076**

RASGAP (RASA2) (NM_006506) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RASGAP (RASA2) (NM_006506) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	RASGAP
Synonyms:	GAP1M
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG224076 representing NM_006506
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCGGCGGCGGCCCTGCTGCTGCGGGGCTTCTCCGAGGCGCCAGCGGCGAGTGCAGACTGCAGAGC
 CCGAGGCCGGGACCAGGACAGTCGCGAGGTTTCGAGTGTTCAGAGCCTGCGGGCAAGATCTGTGAAGC
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 AGATTCGAAGAATTTCCAGTATTTGTCTTTCTATGTTTATGATAAGAATGTTTTACAAAGAGATCTCCG
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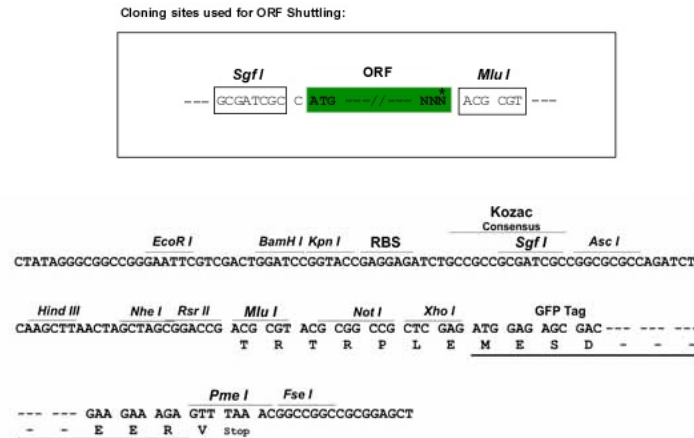
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG224076 representing NM_006506
Red=Cloning site Green=Tags(s)

MAAAAPAAAAASSEAPAASATAEPEAGDQDSREVRVLQSLRGKICEAKNLLPYLGPHKMRDCFCTINLDQ
EEVYRTQVVEKSLSPFFSEEFYFEIPRTFQYLSFYVYDKNVLQRDLRIGKVAIKKEDLCNHSGKETWFSL
QPVDNSNEVQGVHLELKLNELITENGTVCQQLVVIKACHGLPLINGQSCDPYATVSLVGPSRNDQKKT
KVKKKTSNPQFNEIFYFEVTRSSSYTRKSQFQVEEEDIEKLEIRIDLWNGNLVQDVFLGEIKVPVNVLR
TDSSHQAWYLLQPRDNGNKSSKTDDLGSRLNICYTEDYVLPSEYYGPKTLLKSPDVQPIASAAAYIL
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TLKPILDEICDSSKSCEIDPIKLEKEDNVENKLNRYVVDKLFNTIVKSSMSCPTVMCDIFYSLRQMAT
QRFPNDPHVQYSVSSVFLRFFAVAVVSPHTFHLRPHHPDAQTIRTLTLISKTIQTLGWSGSLSKSKSS
FKETFMCFFKMFQEEGYIIAVKKFLDEISSTETKESSTSEPVHLKEGEMKRAQGRTRIGKKNFKKRW
FCLTSRELYHKQPGKDAIYTIIPVKNILAVEKLEESSFNKKNMFQVIHTEKPLYVQANNCVEANEWIDVL
CRVSRNCQNRLSFYHPSVYLNGLWLCQETGENTLGCKPCTAGVPADIQIDIDEDRETERIYSLFTLSLL
KLQKMEEACGTIAVYQGPQKEPDDYSNFVIEDSVTTFKTIQQIKSIEKLEPHEKYRKKRSSSAKYGSK
ENPIVGKAS

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

Cloning Scheme:


ACCN: NM_006506

ORF Size: 2547 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_006506.5](#)

RefSeq Size: 2592 bp

RefSeq ORF: 2550 bp

Locus ID: 5922

UniProt ID: [Q15283](#)

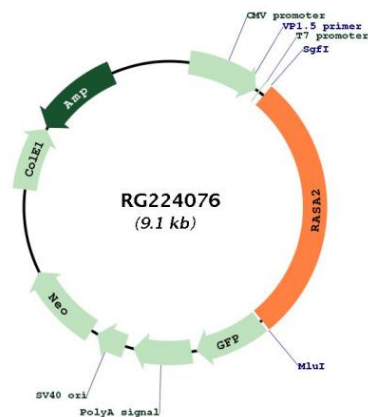
Cytogenetics: 3q23

Domains: C2, BTK, PH, RasGAP

Protein Pathways: MAPK signaling pathway

Gene Summary: The protein encoded by this gene is member of the GAP1 family of GTPase-activating proteins. The gene product stimulates the GTPase activity of normal RAS p21 but not its oncogenic counterpart. Acting as a suppressor of RAS function, the protein enhances the weak intrinsic GTPase activity of RAS proteins resulting in the inactive GDP-bound form of RAS, thereby allowing control of cellular proliferation and differentiation. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2014]

Product images:



Circular map for RG224076