

## Product datasheet for **RG200675**

### **RAB8A (NM\_005370) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** RAB8A (NM\_005370) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** RAB8A  
**Synonyms:** MEL; RAB8  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG200675 representing NM\_005370  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGCGAAGACCTACGATTACCTGTTCAAGCTGCTGCTGATCGGGGACTCGGGGGTGGGGAAGACCTGTG  
 TCCTGTTCCGCTTCTCCGAGGACGCCTCAACTCCACTTTTATCTCCACCATAGGAATTGACTTTAAAT  
 TAGGACCATAGAGCTCGATGGCAAGAGAATTAAGTGCAGATATGGGACACAGCCGGTCAAGAACGGTTT  
 CGGACGATCACAACGGCCTACTACAGGGGTGCAATGGGCATCATGCTGGTCTACGACATACCAACGAGA  
 AGTCTTCGACAACATCCGGAAGTGGATTCGCAACATTGAGGAGCACGCCTCTGCAGACGTCGAAAAGAT  
 GATACTCGGGAACAAGTGTGATGTGAATGACAAGAGACAAGTTTCCAAGGAACGGGGAGAAAAGCTGGCC  
 CTCGACTATGGAATCAAGTTCATGGAGACCAGCGCAAGGCCAACATCAATGTGGAAAATGCATTTTCA  
 CTCTCGCCAGAGATATCAAAGCAAAAATGGACAAAAAATGGAAGGCAACAGCCCCAGGGGAGCAACCA  
 GGGAGTCAAAATCACACCGGACCAGCAGAAGAGGAGCAGCTTTTTCCGATGTGTTCTTCTG

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:** >RG200675 representing NM\_005370  
 Red=Cloning site Green=Tags(s)

MAKTYDYLFKLLLIIGDSGVGKTCVLFSEDAFNSTFISTIGIDFKIRTIELDGKRIKLQIWDTAGQERF  
 RTITTAYYRGAMGIMLVYDITNEKSFNIRNWIRNIEEHASADVEKMILGNKCDVNDKRQVSKERGEKLA  
 LDYGIKFMETSAKANINVENAFFTLARDIKAKMDKKLEGNPQGSNOGVKITPDQKRSFFRCVLL

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** SgfI-MluI



**Cloning Scheme:**


**ACCN:** NM\_005370

**ORF Size:** 621 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\\_005370.5](#)

**RefSeq Size:** 2194 bp

**RefSeq ORF:** 624 bp

**Locus ID:** 4218

**UniProt ID:** [P61006](#)

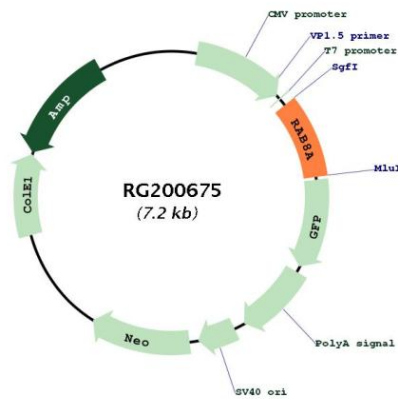
**Cytogenetics:** 19p13.11

**Domains:** ras, RAN, RAS, RHO, RAB, ARF

**Protein Families:** Druggable Genome, Transcription Factors

**Gene Summary:** The protein encoded by this gene is a member of the RAS superfamily which are small GTP/GDP-binding proteins with an average size of 200 amino acids. The RAS-related proteins of the RAB/YPT family may play a role in the transport of proteins from the endoplasmic reticulum to the Golgi and the plasma membrane. This protein shares 97%, 96%, and 51% similarity with the dog RAB8, mouse MEL, and mouse YPT1 proteins, respectively and contains the 4 GTP/GDP-binding sites that are present in all the RAS proteins. The putative effector-binding site of this protein is similar to that of the RAB/YPT proteins. However, this protein contains a C-terminal CAAX motif that is characteristic of many RAS superfamily members but which is not found in YPT1 and the majority of RAB proteins. Although this gene was isolated as a transforming gene from a melanoma cell line, no linkage between MEL and malignant melanoma has been demonstrable. This oncogene is located 800 kb distal to MY09B on chromosome 19p13.1. [provided by RefSeq, Jul 2008]

**Product images:**



Circular map for RG200675