

Product datasheet for **RC200675**

RAB8A (NM_005370) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: RAB8A (NM_005370) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: RAB8A
Synonyms: MEL; RAB8
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC200675 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCGAAGACCTACGATTACCTGTTCAAGCTGCTGCTGATCGGGGACTCGGGGTGGGAAGACCTGTG
 TCCTGTTCCGCTTCTCCGAGGACGCCTTCAACTCCACTTTTATCTCCACCATAGGAATTGACTTTAAAT
 TAGGACCATAGAGCTCGATGGCAAGAGAATTAAGTGCAGATATGGACACAGCCGGTCAAGAACGGTTT
 CGGACGATCACAACGGCCTACTACAGGGGTGCAATGGGCATCATGCTGGTCTACGACATACCAACGAGA
 AGTCCTTCGACAACATCCGGAAGTGGATTCGCAACATTGAGGAGCACGCCTCTGCAGACGTCGAAAAGAT
 GATACTCGGGAACAAGTGTGATGTGAATGACAAGAGACAAGTTTCCAAGGAACGGGGAGAAAAGCTGGCC
 CTCGACTATGGAATCAAGTTCATGGAGACCAGCGCAAGGCCAACATCAATGTGGAAAATGCATTTTCA
 CTCTCGCCAGAGATATCAAAGCAAAAATGGACAAAAAATGGAAGGCAACAGCCCCAGGGGAGCAACCA
 GGGAGTCAAAATCACACCGGACCAGCAGAAGAGGAGCAGCTTTTTCCGATGTGTTCTTCTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC200675 protein sequence
 Red=Cloning site Green=Tags(s)

MAKTYDYLFKLLLIIGDSGVGKTCVLFVRFSEDAFNSTFISTIGIDFKIRTIELDGKRIKLQIWDTAGQERF
 RTITTAYYRGAMGIMLVYDITNEKSFNIRNWIRNIEEHASADVEKMILGNKCDVNDKRQVSKERGEKLA
 LDYGIKFMETSAKANINVENAFFTLARDIKAKMDKKLEGNSPQGSNQGVKITPDQQRSSFFRCVLL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



Chromatograms: https://cdn.origene.com/chromatograms/mk6083_f04.zip

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

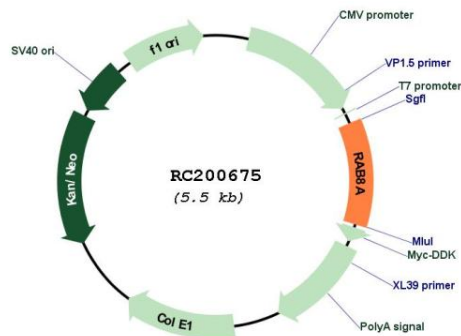
RefSeq ORF: 624 bp

Locus ID: 4218

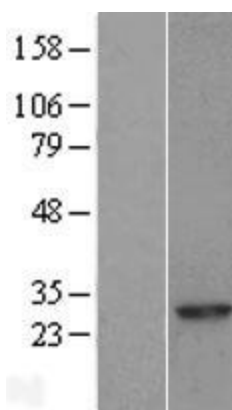
UniProt ID: [P61006](#)
Cytogenetics: 19p13.11
Domains: ras, RAN, RAS, RHO, RAB, ARF
Protein Families: Druggable Genome, Transcription Factors
MW: 23.7 kDa

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]

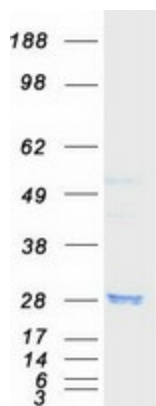
Product images:



Circular map for RC200675



Western blot validation of overexpression lysate (Cat# [LY417348]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200675 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RAB8A protein (Cat# [TP300675]). The protein was produced from HEK293T cells transfected with RAB8A cDNA clone (Cat# RC200675) using MegaTran 2.0 (Cat# [TT210002]).