

Product datasheet for **RC202572**

Rab4 (RAB4A) (NM_004578) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Rab4 (RAB4A) (NM_004578) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Rab4
Synonyms:	HRES-1; HRES-1/RAB4; HRES1; RAB4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC202572 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCGCAGACGGCCATGTCCGAAACCTACGATTTTTTGTAAAGTTCTTGGTTATTGAAATGCAGGAA
CTGGCAAATCTTGCTTACTTCATCAGTTTATTGAAAAAATTCAAAGTACTCAAATCATACAATAGG
AGTGGAAATTTGGTTCAAAGATAATAAATGTTGGTAAATATGTAAGTTACAAATATGGGATACAGCA
GGACAAGAACGATTCAGGTCCGTGACGAGAAGTTATTACCGAGGCGCGCCGGGGCTCTCCTCGTCTATG
ATATCACCAGCCGAGAACTACAATGCGCTTACTAATTGGTTAACAGATGCCGAATGCTAGCGAGCCA
GAACATTGTGATCATCCTTTGTGAAACAAGAAGGACCTGGATGCAGATCGTGAAGTTACCTTCTTAGAA
GCCTCCAGATTTGCTCAAGAAAATGAGCTGATGTTTTTGGAAACAAGTGCCTCACAGGGGAGAATGTAG
AAGAGGCTTTTGTACAGTGTGCAAGAAAATACTTAACAAAATCGAATCAGGTGAGCTGGACCCAGAAA
AATGGGCTCAGGTATTCAGTACGGAGATGCTGCCTTGAGACAGCTGAGGTCACCGCGCGCCACAGGCC
CCGAACGCTCAGGAGTGTGGTTGT

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC202572 protein sequence
 Red=Cloning site Green=Tags(s)

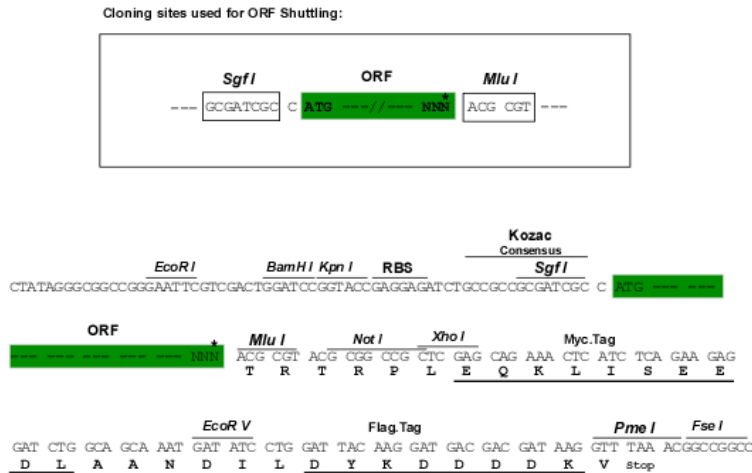
MSQTAMSETYDFLKFVIGNAGTGKSCLLHQFIEKKFKDDSNHTIGVEFGSKIINVGGKYVKLQIWDTA
 GQERFRSVTRSYRGAAGALLVDITSRETYNALTNWL TDARMLASQNIIVILCGNKKDLADREVTFL
 ASRFAQENELMFLETSALTGENVEEAFVQCARKILNKIESGELPERMGSIGIQYGDAAALRQLRSPRAQA
 PNAQECGC

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6085_d04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_004578

ORF Size: 654 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_004578.4](#)

RefSeq Size: 3056 bp

RefSeq ORF: 657 bp

Locus ID: 5867

UniProt ID: [P20338](#)

Cytogenetics: 1q42.13

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

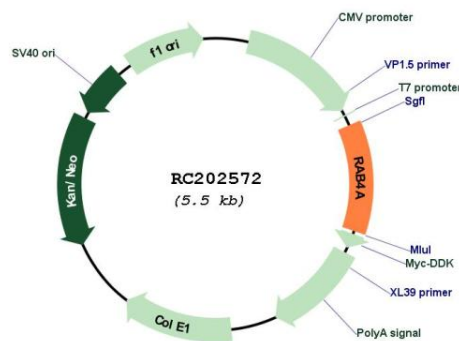
Protein Families: Druggable Genome

Protein Pathways: Endocytosis

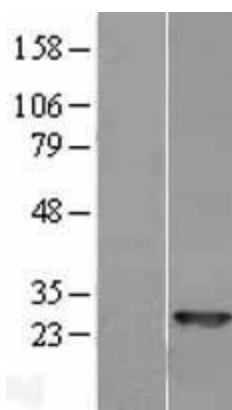
MW: 24.4 kDa

Gene Summary: This gene is a member of the largest group in the Ras superfamily of small GTPases, which regulate membrane trafficking. The encoded protein is associated with early endosomes and is involved in their sorting and recycling. The protein also plays a role in regulating the recycling of receptors from endosomes to the plasma membrane. Alternatively spliced transcript variants have been observed for this gene. [provided by RefSeq, Dec 2012]

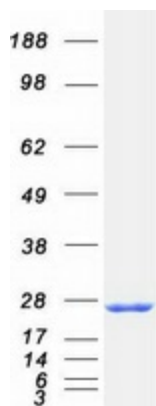
Product images:



Circular map for RC202572



Western blot validation of overexpression lysate (Cat# [LY401450]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202572 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RAB4A protein (Cat# [TP302572]). The protein was produced from HEK293T cells transfected with RAB4A cDNA clone (Cat# RC202572) using MegaTran 2.0 (Cat# [TT210002]).