

## Product datasheet for **RG202572**

### **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:	TurboGFP
Symbol:	Rab4
Synonyms:	HRES-1; HRES-1/RAB4; HRES1; RAB4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG202572 representing NM_004578 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTCGCAGACGGCCATGTCCGAAACCTACGATTTTTTGTAAAGTTCTTGGTTATTGGAATGCAGGAA  
CTGGCAAATCTTGCTTACTTCATCAGTTTATTGAAAAAATTCAAAGATGACTCAAATCATACAATAGG  
AGTGGAATTTGGTTCAAAGATAATAAATGTTGGTAAATATGTAAGTTACAAATATGGGATACAGCA  
GGACAAGAACGATTCAGGTCCGTGACGAGAAGTTATTACCGAGGCGCGCCGGGGCTCTCCTCGTCTATG  
ATATCACCAGCCGAGAAACCTACAATGCGCTTACTAATTGGTTAACAGATGCCGAATGCTAGCGAGCCA  
GAACATTGTGATCATCCTTTGTGAAACAAGAAGGACCTGGATGCAGATCGTGAAGTTACCTTCTTAGAA  
GCCTCCAGATTTGCTCAAGAAAATGAGCTGATGTTTTTGGAAACAAGTGCCTCACAGGGGAGAATGTAG  
AAGAGGCTTTTGTACAGTGTGCAAGAAAATACTTAACAAAATCGAATCAGGTGAGCTGGACCCAGAAA  
AATGGGCTCAGGTATTCAGTACGGAGATGCTGCCTTGAGACAGCTGAGGTCACCGCGGCCGCACAGGCC  
CCGAACGCTCAGGAGTGTGTTGT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG202572 representing NM\_004578  
 Red=Cloning site Green=Tags(s)

MSQTAMSETYDFLKFVIGNAGTGKSCLLHQFIEKKFKDDSNHTIGVEFGSKIINVGGKYVKLQIWDTA  
 GQERFRSVTRSYRGAAGALLVYDITSRETYNALTNWLTDARMLASQNIIVILCGNKKDLADREVTFL  
 ASRFAQENELMFLETSALTGENVEEAFVQCARKILNKIESGELDPERMGSGIQYGDAAALRQLRSPRRAQA  
 PNAQECGC

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**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:** 1861 bp

**RefSeq ORF:** 657 bp

**Locus ID:** 5867

**UniProt ID:** [P20338](#)

**Cytogenetics:** 1q42.13

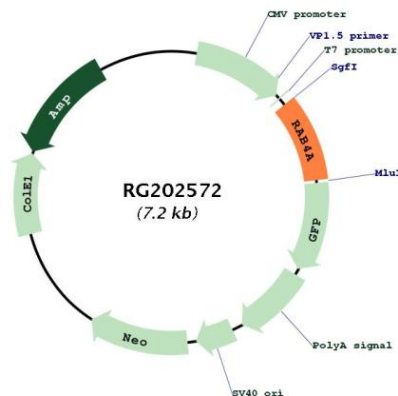
**Domains:** ras, RAN, RAS, RHO, RAB, ARF

**Protein Families:** Druggable Genome

**Protein Pathways:** Endocytosis

**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 RG202572