

Product datasheet for RC201555

RAB13 (NM_002870) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
 Product Name: RAB13 (NM_002870) Human Tagged ORF Clone
 Tag: Myc-DDK
 Symbol: RAB13
 Synonyms: GIG4
 Mammalian Cell Selection: Neomycin
 Vector: pCMV6-Entry (PS100001)
 E. coli Selection: Kanamycin (25 ug/mL)
 ORF Nucleotide Sequence: >RC201555 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCCAAAGCCTACGACCACCTCTTCAAGTTGCTGCTGATCGGGGACTCGGGGTGGGCAAGACTTGTC
 TGATCATTCGCTTTCAGAGGACAACCTCAACAACACTTACATCTCCACCATCGGAATTGATTTCAAGAT
 CCGCACTGTGGATATAGAGGGGAAGAAGATCAAACAAGTCTGGGACACGGCTGGCCAAGAGCGGTTCC
 AAGACAATAACTACTGCCTACTACCGTGGAGCCATGGGCATTATCCTAGTATACGACATCACGGATGAGA
 AATCTTTGAGAATATTCAGAAGTGGATGAAAAGCATCAAGGAGAATGCCTCGGCTGGGGTGGAGCGCCT
 CTTGCTGGGGAACAAATGTGACATGGAGCCAAGAGGAAGGTGCAGAAGGAGCAGGCCGATAAGTTGGCT
 CGAGAGCATGGAATCCGATTTTTCGAACTAGTGCTAAATCCAGTATGAATGTGGATGAGCTTTTGTGTT
 CCCTGGCCCGGACATCTTGCTCAAGTCAGGAGCCGGAGATCAGGAAACGGCAACAAGCCTCCCAGTAC
 TGACCTGAAAACCTGTGACAAGAAGAACACCAACAAGTGCTCCCTGGGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC201555 protein sequence
 Red=Cloning site Green=Tags(s)

MAKAYDHLFKLLLIGDSGVGKTCIIIRFAEDNFNNTYISTIGIDFKIRTVDIEGKKIKLQVWDTAGQERF
 KTITTAYYRGAMGIIILVYDITDEKSFENIQNWMKSIKENASAGVERLLLGNKCDMEAKRKVQKEQADKLA
 REHGIRFFETSASKSSMNVDFAFSSLARDILLKSGRRSGNGNKPPSTDLKTCDDKNTNKCSLG

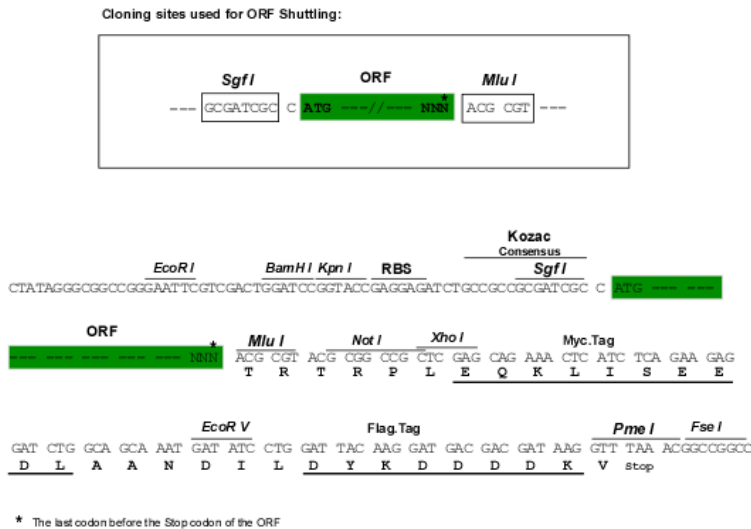
TRTRPLEQKLISEEDLAANDILDYKDDDDKV



Chromatograms: https://cdn.origene.com/chromatograms/mk6073_c07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002870

ORF Size: 609 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

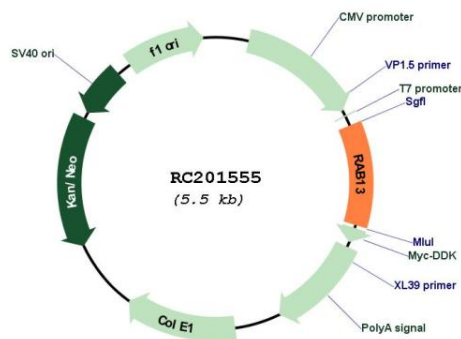
RefSeq: [NM_002870.5](#)

RefSeq Size: 1235 bp

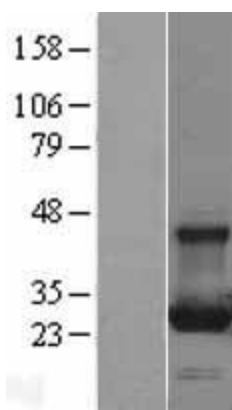
RefSeq ORF: 612 bp
Locus ID: 5872
UniProt ID: [P51153](#)
Cytogenetics: 1q21.3
Domains: ras, RAN, RAS, RHO, RAB, ARF
Protein Families: Druggable Genome
Protein Pathways: Tight junction
MW: 22.8 kDa

Gene Summary: This gene is a member of the Rab family of small G proteins and plays a role in regulating membrane trafficking between trans-Golgi network (TGN) and recycling endosomes (RE). The encoded protein is involved in the assembly of tight junctions, which are components of the apical junctional complex (AJC) of epithelial cells. The AJC plays a role in forming a barrier between luminal contents and the underlying tissue. Additional functions associated with the protein include endocytic recycling of occludin, regulation of epithelial cell scattering, neuronal regeneration and regulation of neurite outgrowth. Alternately spliced transcript variants have been observed for this gene. A pseudogene associated with this gene is located on chromosome 12. [provided by RefSeq, Jan 2013]

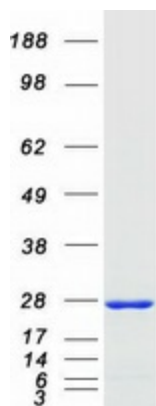
Product images:



Circular map for RC201555



Western blot validation of overexpression lysate (Cat# [LY401011]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201555 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RAB13 protein (Cat# [TP301555]). The protein was produced from HEK293T cells transfected with RAB13 cDNA clone (Cat# RC201555) using MegaTran 2.0 (Cat# [TT210002]).