

## **Product datasheet for RG201555**

## RAB13 (NM 002870) Human Tagged ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: RAB13 (NM 002870) Human Tagged ORF Clone

Tag: TurboGFP

Symbol: RAB13

Synonyms: GIG4

Mammalian Cell Neomycin

Selection:

Vector: pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >RG201555 representing NM\_002870

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGCCAAAGCCTACGACCACCTCTTCAAGTTGCTGCTGATCGGGGACTCGGGGGTGGGCAAGACTTGTC
TGATCATTCGCTTTGCAGAGGACAACTTCAACAACACTTACATCTCCACCATCGGAATTGATTTCAAGAT
CCGCACTGTGGATATAGAGGGGAAGAAGATCAAACTACAAGTCTGGGACACGGCTGGCCAAGAGCGGTTC
AAGACAATAACTACTGCCTACTACCGTGGAGCCATGGGCATTATCCTAGTATACGACATCACGGATGAGA
AATCTTTCGAGAATATTCAGAACTGGATGAAAAGCATCAAGGAGAATGCCTCGGCTGGGGTGGAGCGCCT
CTTGCTGGGGAACAAATGTGACATGGAGGCCAAGAGGAAGGTGCAGAAGGAGCAGCCGATAAGTTGGCT
CGAGAGCATGGAATCCGATTTTTCGAAACTAGTGCTAAATCCAGTATGAATGTGGATGAGGCTTTTAGTT
CCCTGGCCCGGGACATCTTGCTCAAGTCAGGAGGCCGGAGATCAGGAAACGGCAACAAGCCTCCCAGTAC

TGACCTGAAAACTTGTGACAAGAAGAACACCAACAAGTGCTCCCTGGGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG201555 representing NM\_002870

Red=Cloning site Green=Tags(s)

MAKAYDHLFKLLLIGDSGVGKTCLIIRFAEDNFNNTYISTIGIDFKIRTVDIEGKKIKLQVWDTAGQERFKTITTAYYRGAMGIILVYDITDEKSFENIQNWMKSIKENASAGVERLLLGNKCDMEAKRKVQKEQADKLA

REHGIRFFETSAKSSMNVDEAFSSLARDILLKSGGRRSGNGNKPPSTDLKTCDKKNTNKCSLG

TRTRPLE - GFP Tag - V

**Restriction Sites:** Sgfl-Mlul



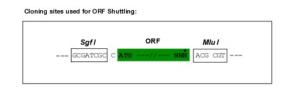
**OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

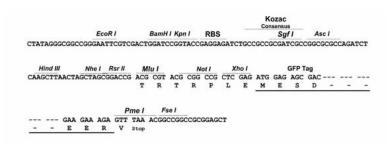
CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



## **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.

**RefSeq:** NM 002870.5

 RefSeq Size:
 1211 bp

 RefSeq ORF:
 612 bp

 Locus ID:
 5872

 UniProt ID:
 P51153

 Cytogenetics:
 1q21.3



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

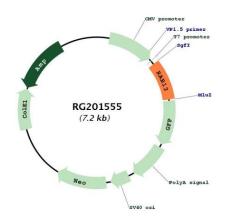
**Protein Families:** Druggable Genome

**Protein Pathways:** Tight junction

**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 RG201555