

## Product datasheet for **RC200431**

### **RAB7L1 (RAB29) (NM\_003929) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** RAB7L1 (RAB29) (NM\_003929) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** RAB7L1  
**Synonyms:** RAB7L; RAB7L1  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC200431 ORF sequence  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGCAGCCGCGACCACCTGTTCAAAGTCTGGTGGTGGGGACGCCGAGTGGGCAAGACGTCGCTGG  
TGCAGCGATATCCCAGGACAGCTTCAGCAAACACTACAAGTCCACGGTGGGAGTGGATTTTCTGCTGAA  
GGTTCTCCAGTGGTCTGACTACGAGATAGTGGGCTTCAGCTGTGGGATATTGCAGGGCAGGAGCGCTTC  
ACCTCTATGACACGATTGTATTATCGGGATGCCTCTGCCTGTATTATGTTTGACGTTACCAATGCCA  
CTACCTTCAGCAACAGCCAGAGGTGAAACAGGACCTAGACAGCAAGCTCACACTACCAATGGAGAGCC  
GGTGCCTGCCTGCTCTTGGCCAACAAGTGTGATCTGTCCCTTGGGAGTGGAGCCGGGACAGATTGAC  
CGGTTTCAGTAAAGAGAACGGTTTTCACAGTTGGACAGAAACATCAGTCAAGGAGAACAATAATTAATG  
AGGCTATGAGAGTCTCATTGAAAAGATGATGAGAAAATCCACAGAAGATATCATGTCTTTGTCCACCCA  
AGGGGACTACATCAATCTACAAACCAAGTCTCCAGCTGGTCTGCTGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC200431 protein sequence  
**Red=Cloning site Green=Tags(s)**

MGSRDHLFKVLVVGDAAVGKTSLVQRYSDSFSKHYKSTVGVDFALKVLQWSDYIEIVRLQLWDIAGQERF  
TSMTRLYYRDASACVIMFDVTNATTFSNSQRWKQDLDSKLTLPNGEPVPCLLLANKCDLSPWAVSRDQID  
RFSKENGFTGWTETSVKENKNINEAMRVLIEKMMRNSTEDIMSLSTQGDYINLQTKSSSWSCC

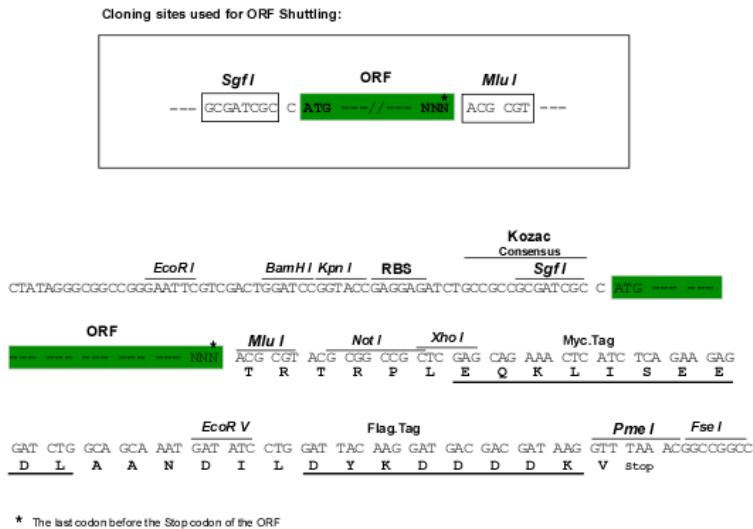
**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**



Chromatograms: [https://cdn.origene.com/chromatograms/mk6386\\_g10.zip](https://cdn.origene.com/chromatograms/mk6386_g10.zip)

Restriction Sites: Sgfl-MluI

Cloning Scheme:



ACCN: NM\_003929

ORF Size: 609 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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\\_003929.3](#)

**RefSeq Size:** 3324 bp

**RefSeq ORF:** 612 bp

**Locus ID:** 8934

**UniProt ID:** [O14966](#)

**Cytogenetics:** 1q32.1

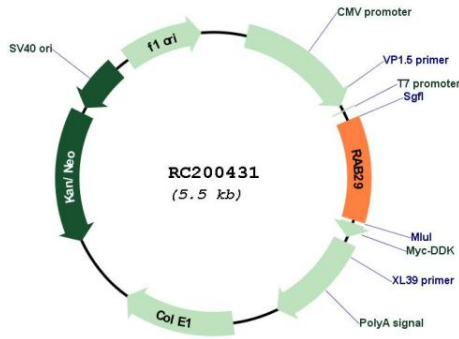
**Domains:** ras, RAN, RAS, RHO, RAB

**Protein Families:** Druggable Genome

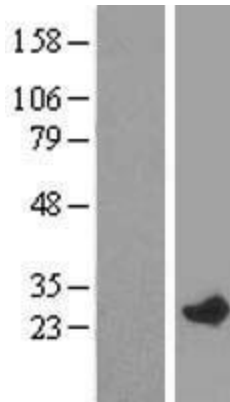
**MW:** 23.2 kDa

**Gene Summary:** Rab GTPase key regulator in vesicle trafficking. Essential for maintaining the integrity of the endosome-trans-Golgi network structure. Together with LRRK2, plays a role in the retrograde trafficking pathway for recycling proteins, such as mannose 6 phosphate receptor (M6PR), between lysosomes and the Golgi apparatus in a retromer-dependent manner. Regulates neuronal process morphology in the intact central nervous system (CNS). May play a role in the formation of typhoid toxin transport intermediates during *Salmonella enterica* serovar Typhi (*S.Typhi*) epithelial cell infection.[UniProtKB/Swiss-Prot Function]

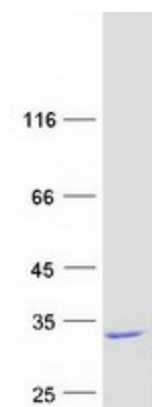
Product images:



Circular map for RC200431



Western blot validation of overexpression lysate (Cat# [LY427656]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC227093] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RAB29 protein (Cat# [TP300431]). The protein was produced from HEK293T cells transfected with RAB29 cDNA clone (Cat# RC200431) using MegaTran 2.0 (Cat# [TT210002]).