

Product datasheet for RC203873L2

OriGene Technologies, Inc.

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Rab5 (RAB5A) (NM_004162) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Rab5 (RAB5A) (NM 004162) Human Tagged Lenti ORF Clone

Tag: mGFP
Symbol: Rab5
Synonyms: RAB5
Mammalian Cell None

Selection:

Vector: pLenti-C-mGFP (PS100071)

E. coli Selection: Chloramphenicol (34 ug/mL)

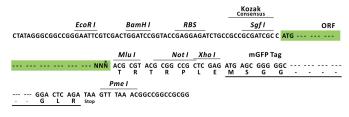
ORF Nucleotide The ORF insert of this clone is exactly the same as(RC203873).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF.

ACCN: NM_004162

ORF Size: 645 bp



Rab5 (RAB5A) (NM_004162) Human Tagged Lenti ORF Clone - RC203873L2

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).

1. Centrifuge at 5,000xg for 5min. **Reconstitution Method:**

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 004162.3, NP 004153.2

RefSeq Size: 2548 bp RefSeq ORF: 648 bp Locus ID: 5868 **UniProt ID:** P20339

Cytogenetics: 3p24.3

Domains: ras, RAN, RAS, RHO, RAB

Druggable Genome **Protein Pathways:** Amyotrophic lateral sclerosis (ALS), Endocytosis

MW: 23.7 kDa

Protein Families:

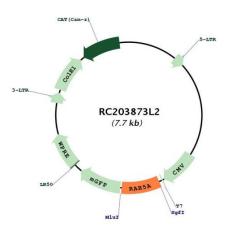
The small GTPases Rab are key regulators of intracellular membrane trafficking, from the **Gene Summary:**

> formation of transport vesicles to their fusion with membranes. Rabs cycle between an inactive GDP-bound form and an active GTP-bound form that is able to recruit to membranes different sets of downstream effectors directly responsible for vesicle formation, movement, tethering and fusion. RAB5A is required for the fusion of plasma membranes and early endosomes (PubMed:10818110, PubMed:14617813, PubMed:16410077, PubMed:15378032). Contributes to the regulation of filopodia extension (PubMed:14978216). Required for the exosomal release of SDCBP, CD63, PDCD6IP and syndecan (PubMed:22660413). Regulates maturation of apoptotic cell-containing phagosomes, probably downstream of DYN2 and

PIK3C3 (By similarity).[UniProtKB/Swiss-Prot Function]



Product images:



Circular map for RC203873L2