

Product datasheet for RC203973L3

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OriGene Technologies, Inc.

RAB3A (NM_002866) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: RAB3A (NM_002866) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: RAB3A

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

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

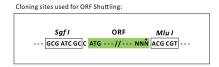
ORF Nucleotide

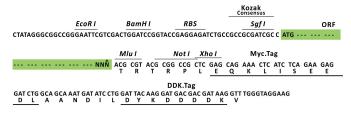
The ORF insert of this clone is exactly the same as(RC203973).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





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

ACCN: NM_002866

ORF Size: 660 bp



RAB3A (NM_002866) Human Tagged Lenti ORF Clone - RC203973L3

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: <u>NM 002866.3</u>

RefSeq Size: 1528 bp
RefSeq ORF: 663 bp
Locus ID: 5864
UniProt ID: P20336

Cytogenetics: 19p13.11

Domains: ras, RAN, RAS, RHO, RAB

Protein Families: Druggable Genome

MW: 25 kDa

Gene Summary: Small GTP-binding protein that plays a central role in regulated exocytosis and secretion.

Controls the recruitment, tethering and docking of secretory vesicles to the plasma

membrane (By similarity). Upon stimulation, switches to its active GTP-bound form, cycles to vesicles and recruits effectors such as RIMS1, RIMS2, Rabphilin-3A/RPH3A, RPH3AL or SYTL4

to help the docking of vesicules onto the plasma membrane (By similarity). Upon GTP

hydrolysis by GTPase-activating protein, dissociates from the vesicle membrane allowing the exocytosis to proceed (By similarity). Stimulates insulin secretion through interaction with

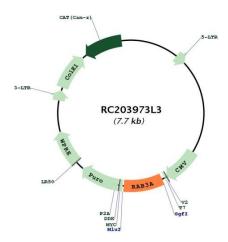
RIMS2 or RPH3AL effectors in pancreatic beta cells (By similarity). Regulates calcium-

dependent lysosome exocytosis and plasma membrane repair (PMR) via the interaction with 2 effectors, SYTL4 and myosin-9/MYH9 (PubMed:27325790). Acts as a positive regulator of acrosome content secretion in sperm cells by interacting with RIMS1 (PubMed:22248876, PubMed:30599141). Plays also a role in the regulation of dopamine release by interacting with

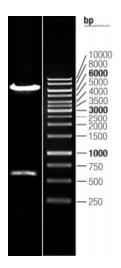
synaptotagmin I/SYT (By similarity).[UniProtKB/Swiss-Prot Function]



Product images:



Circular map for RC203973L3



Double digestion of RC203973L3 using Sgfl and Mlul $\,$