

## **Product datasheet for RC211472**

## RAB12 (NM 001025300) Human Tagged ORF Clone

## **Product data:**

**Product Type:** Expression Plasmids

Product Name: RAB12 (NM\_001025300) Human Tagged ORF Clone

Tag: Myc-DDK
Symbol: RAB12

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

ORF Nucleotide >RC211472 representing NM\_001025300
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



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Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com Protein Sequence: >RC211472 representing NM\_001025300

Red=Cloning site Green=Tags(s)

MDPGAALQRRAGGGGLGAGSPALSGGQGRRRKQPPRPADFKLQVIIIGSRGVGKTSLMERFTDDTFCEA CKSTVGVDFKIKTVELRGKKIRLQIWDTAGQERFNSITSAYYRSAKGIILVYDITKKETFDDLPKWMKMI DKYASEDAELLLVGNKLDCETDREITRQQGEKFAQQITGMRFCEASAKDNFNVDEIFLKLVDDILKKMPL DILRNELSNSILSLQPEPEIPPELPPPRPHVRCC

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: <a href="https://cdn.origene.com/chromatograms/mk8025">https://cdn.origene.com/chromatograms/mk8025</a> f12.zip

**Restriction Sites:** Sgfl-Mlul

Cloning Scheme:



TATAGGGGGGCCG	EcoR GGAAT1	_	GACT	Bami GGAT			RB		- CTG0	Co	ozac nsensi Sg GCGA	ıs f I	cc	TG -		-
ORF		MNN	ACC T	llu I G CGT R	ACC T	No G CGC R		_	hol GAG	CAG Q	AAA K	-	Tag ATC	TCA S	GAA E	gag E
AT CTG GCA GC	A AAT	GAT	ATC	CTG L	GAT D		Flag.1 AAG K	-	GAC D	GAC D	GAT D	AAG K	GTT	TAA	F. ACGG	se I

<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_001025300

ORF Size: 732 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: <u>NM 001025300.2</u>, <u>NP 001020471.2</u>

RefSeq Size:2138 bpRefSeq ORF:735 bp

 Locus ID:
 201475

 UniProt ID:
 Q6IQ22

 Cytogenetics:
 18p11.22

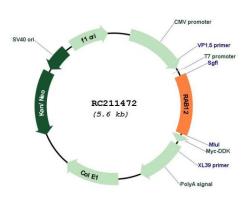
 MW:
 27.1 kDa

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

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 set of downstream effectors directly responsible for vesicle formation, movement, tethering and fusion. That Rab may play a role in protein transport from recycling endosomes to lysosomes regulating, for instance, the degradation of the transferrin receptor. Involved in

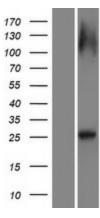
autophagy (By similarity).[UniProtKB/Swiss-Prot Function]

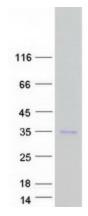
## **Product images:**



Circular map for RC211472







Western blot validation of overexpression lysate (Cat# [LY422432]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211472 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

Coomassie blue staining of purified RAB12 protein (Cat# [TP311472]). The protein was produced from HEK293T cells transfected with RAB12 cDNA clone (Cat# RC211472) using MegaTran 2.0 (Cat# [TT210002]).