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Product datasheet for MG202384

Rab11a (NM_017382) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Rab11a (NM_017382) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Rab11a
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG202384 representing NM_017382
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGCACCCGCGACGACGAGTACGACTACCTCTTTAAAGTTGTCCTTATTGGAGATTCTGGTGTTGGAA
AGAGTAACCTCCTGTCTCGATTTACTCGAAATGAGTTTAATCTGGAAAGCAAGAGTACCATTGGAGTAGA
GTTTGCAACAAGAAGCATCCAGGTTGATGGGAAAACAATAAAGGCACAGATATGGGACACAGCAGGGCAG
GAGCGGTACAGGGCTATAACGTCTGCATACTATCGTGGAGCAGTAGGTGCCTTATTGGTTTATGACATTG
CTAAGCATCTCACATATGAAAATGTAGAGCGATGGCTGAAAGAACTGAGAGATCATGCTGATAGTAACAT
TGTTATCATGCTTGTGGGCAATAAGAGTGATTTACGTCATCTCAGGGCAGTTCCTACAGATGAAGCAAGA
GCTTTTGCAGAGAAGAATGGTTTGTCATTCATTGAGACATCTGCTCTAGATTCTACAAATGTTGAAGCTG
CTTTTCAGACAATTCTAACAGAGATATACCGCATTGTTTCTCAGAAGCAAATGTCAGACAGACGTGAAAA
TGACATGTCTCCAAGCAACAATGTGGTTCCTATTCATGTTCCGCCCACCACTGAGAACAAGCCAAAGGTG
CAGTGCTGTCAGAACATC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG202384 representing NM_017382
Red=Cloning site Green=Tags(s)

MGTRDDEYDYLFKVVLIGDSGVGKSNLLSRFTRNEFNLESKSTIGVEFATRSIQVDGKTIKAQIWDTAGQ
ERYRAITSAYYRGAVGALLVYDIAKHLTYENVERWLKELRDHADSNIVIMLVGNKSDLRHLRAVPTDEAR
AFAEKNGLSFIETSALDSTNVEAAFQTILTEIYRIVSQKQMSDRRENDMSPSNNVVPIHVPPTTENKPKV
QCCQNI

TRTRPLE - GFP Tag - V

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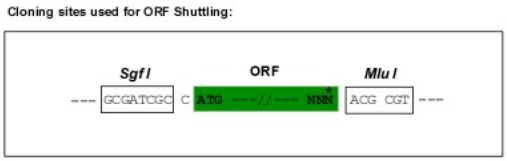
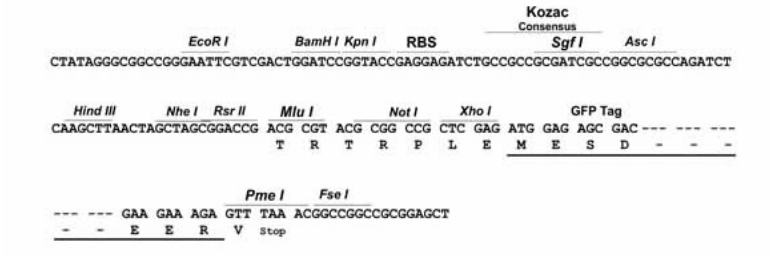
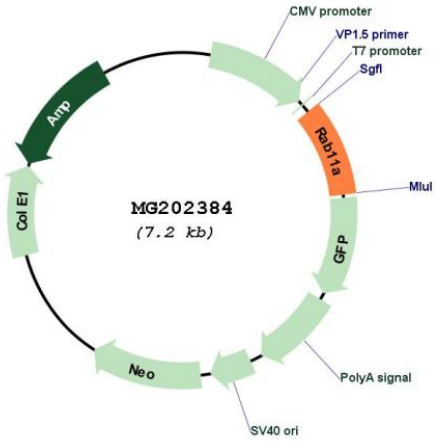
Restriction Sites: SgfI-MluI

Cloning Scheme:





Plasmid Map:



ACCN: NM_017382

ORF Size: 648 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_017382.5, NP_059078.2
RefSeq Size:	2333 bp
RefSeq ORF:	651 bp
Locus ID:	53869
UniProt ID:	P62492
Cytogenetics:	9 C
Gene Summary:	The small GTPases Rab areR 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. The small Rab GTPase RAB11A regulates endocytic recycling. Acts as a major regulator of membrane delivery during cytokinesis. Together with MYO5B and RAB8A participates in epithelial cell polarization. Together with RAB3IP, RAB8A, the exocyst complex, PARD3, PRKCI, ANXA2, CDC42 and DNMBP promotes transcytosis of PODXL to the apical membrane initiation sites (AMIS), apical surface formation and lumenogenesis. Together with MYO5B participates in CFTR trafficking to the plasma membrane and TF (Transferrin) recycling in nonpolarized cells. Required in a complex with MYO5B and RAB11FIP2 for the transport of NPC1L1 to the plasma membrane. Participates in the sorting and basolateral transport of CDH1 from the Golgi apparatus to the plasma membrane. Regulates the recycling of FCGRT (receptor of Fc region of monomeric Ig G) to basolateral membranes (By similarity). May also play a role in melanosome transport and release from melanocytes.[UniProtKB/Swiss-Prot Function]