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Product datasheet for MR202203

Rab8a (NM_023126) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Rab8a (NM_023126) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Rab8a
Synonyms:	AA409338; Mel
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR202203 representing NM_023126
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGAAGACCTACGATTACCTGTTCAAGCTGCTGCTGATCGGGGACTCGGGGGTAGGGAAGACCTGTG
TCCTGTTCCGCTTCTCCGAGGACGCCTTCAACTCCACATTCATCTCTACCATAGGAATTGACTTTAAAAT
TAGGACCATAGAGCTCGATGGCAAGAGGATTAAACTGCAGATATGGGACACGGCCGGCCAGGAGCGGTTT
CGAACAATCACGACAGCCTACTACAGGGGTGCCATGGGTATCATGCTGGTCTACGACATTACCAATGAGA
AGTCCTTTGACAACATCCGGAATTGGATTCGGAACATTGAAGAGCATGCCTCTGCAGACGTGGAGAAGAT
GATACTGGGGAATAAGTGTGATGTGAATGACAAGAGACAGGTGTCCAAGGAACGGGGAGAAAAGCTGGCA
CTCGACTATGGGATCAAGTTCATGGAGACCAGTGCAAAGGCCAACATCAATGTGGAGAATGCATTTTTCA
CTCTTGCCAGGGATATCAAAGCAAAAATGGACAAAAAATTGGAAGGGAACAGCCCGCAGGGGAGCAGCCA
TGGAGTCAAGATCACAGTGGAGCAGCAGAAGAGGACCAGCTTCTTCCGGTGCAGTCTCCTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR202203 representing NM_023126
Red=Cloning site Green=Tags(s)

MAKTYDYLFKLLLIGDSGVGKTCVLFRFSEDAFNSTFISTIGIDFKIRTIELDGKRIKLQIWDTAGQERF
RTITTAYYRGAMGIMLVYDITNEKSFDNIRNWIRNIEEHASADVEKMILGNKCDVNDKRQVSKERGEKLA
LDYGIKFMETSAKANINVENAFFTLARDIKAKMDKKLEGNSPQGSSHGVKITVEQQKRTSFFRCSLL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

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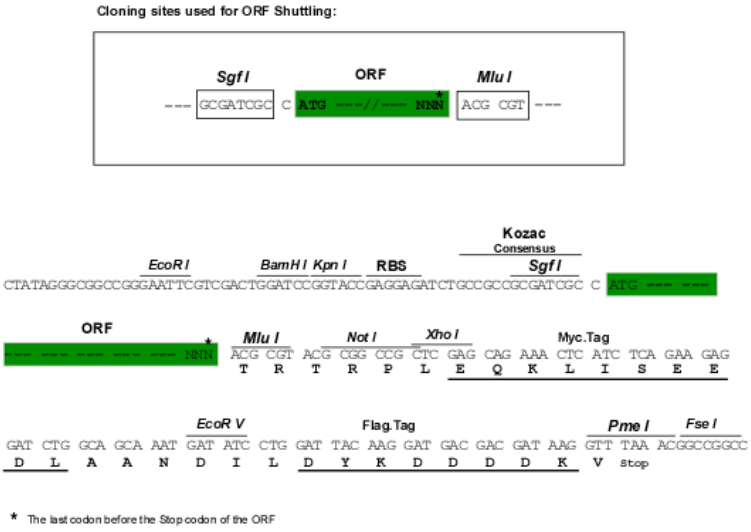
Chromatograms: https://cdn.origene.com/chromatograms/mm9032_h12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_023126

ORF Size: 621 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 or by calling 301.340.3188 option 3 for pricing and delivery.

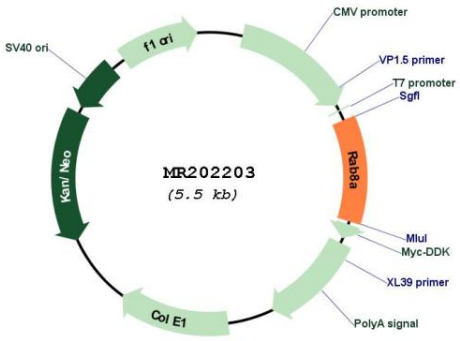
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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.
RefSeq:	NM_023126.2, NP_075615.2
RefSeq Size:	2012 bp
RefSeq ORF:	624 bp
Locus ID:	17274
UniProt ID:	P55258
Cytogenetics:	8 34.84 cM
MW:	24.1 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 sets of downstream effectors directly responsible for vesicle formation, movement, tethering and fusion. That Rab is involved in polarized vesicular trafficking and neurotransmitter release. Together with RAB11A, RAB3IP, 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 and RAB11A participates in epithelial cell polarization. Plays an important role in ciliogenesis (By similarity). Together with MICALL2, may also regulate adherens junction assembly (PubMed:18094055). May play a role in insulin-induced transport to the plasma membrane of the glucose transporter GLUT4 and therefore play a role in glucose homeostasis (By similarity). Involved in autophagy (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR202203