

Product datasheet for **RC206242**

RAB33B (NM_031296) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RAB33B (NM_031296) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RAB33B
Synonyms:	SMC2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC206242 representing NM_031296 Red =Cloning site Blue =ORF Green =Tags(s)

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGATCGCC

ATGGCTGAGGAGATGGAGTCGTCGCTCGAGGCAAGCTTTTCGTCCAGCGGGCAGTGTGAGGGCCCTCAG
 GGTTTTTGCTCCTGCCGCTCCCGCATCTTCAAGATAATCGTGATCGGCGACTCCAATGTGGGCAAGAC
 ATGCCTGACCTACCGCTTCTGCGCTGGCCGCTTCCCCGACCGACCGAGGCCACGATAGGGGTGGATTTT
 CGAGAACGAGCGGTGGAGATTGATGGGGAGCGCATCAAGATCCAGCTATGGGACACAGCAGGACAAGAAC
 GATTTCAGAAAGAGCATGGTTTCAGCACTACTACAGAAATGTACATGCTGTTGTCTTCGTGTATGATATGAC
 CAACATGGCTAGTTTTCATAGCCTACCATCTTGGATAGAAGAATGCAAACAACATTTGCTAGCCAATGAT
 ATACCACGGATTCTTGTGGAAATAAATGTGACTTGAGAAGTGCCATACAGGTACCCACAGACTTGGCAC
 AAAAAATTTGCTGACACACACAGTATGCCTTTGTTTGAAACGTCTGCTAAAAACCCCAATGATAATGACCA
 TGTGGAAGCTATATTTATGACCTTGGCTCATAAGCTTAAGAGCCACAAACCATTAATGCTTAGTCAGCCC
 CCTGATAATGGAATTATCCTGAAGCCTGAACCAAAGCCTGCAATGACGTGCTGGTGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA


[View online »](#)

Protein Sequence: >RC206242 representing NM_031296
 Red=Cloning site Green=Tags(s)

MAEEMESSLEASFSSSGAVSGASGLPPARSRIFKIIVIGDSNVGKTCLTYRFCAGRFPDRTEATIGVDF
 RERAVEIDGERIKIQLWDTAGQERFRKSMVQHYRNVHAVVFYDMTNMASFHSLSWIEECKQHLLAND
 IPRILVGNKCDLRSIAIQVPTDLAQKFADTHSMPLFETSAPKNPDNDHVEAIFMTLAHKLKSHPKPLMSQP
 PDNGIILKPEPKPAMTCWC

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja1515_e10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_031296

ORF Size: 687 bp

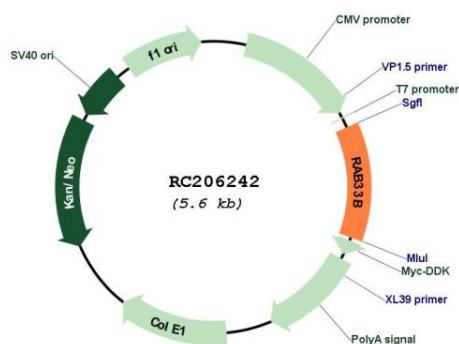
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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](#)

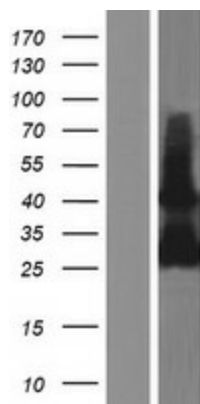
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<ol style="list-style-type: none"> 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:	NM_031296.3
RefSeq Size:	3876 bp
RefSeq ORF:	690 bp
Locus ID:	83452
UniProt ID:	Q9H082
Cytogenetics:	4q31.1
Domains:	ras, RAN, RAS, RHO, RAB
Protein Families:	Druggable Genome
MW:	25.5 kDa
Gene Summary:	<p>This gene encodes a small GTP-binding protein of the Rab GTPase family, whose members function in vesicle transport during protein secretion and endocytosis. Rab GTPases are active, membrane-associated proteins that recruit effector proteins in the GTP-bound state and inactive cytosolic proteins when in a GDP-bound state. The protein encoded by this gene is ubiquitously expressed and has been implicated in Golgi to endoplasmic reticulum cycling of Golgi enzymes. In addition, this protein regulates Golgi homeostasis and coordinates intra-Golgi retrograde trafficking. Allelic variants in this gene have been associated with Dyggve-Melchior-Clausen syndrome and Smith-McCort dysplasia 2, which are autosomal recessive spondyloepimetaphyseal dysplasias characterized by skeletal abnormalities. [provided by RefSeq, Sep 2016]</p>

Product images:



Circular map for RC206242



Western blot validation of overexpression lysate (Cat# [LY410569]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206242 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).