

Product datasheet for **RG202196**

RAB38 (NM_022337) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	RAB38
Synonyms:	NY-MEL-1; rrGTPbp
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG202196 representing NM_022337
Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCAGGCCCGCACAAAGGAGCACCTGTACAAGTTGCTGGTGATTGGCGACCTGGGCGTGGGGAAGACCA
GTATCATCAAGCGCTACGTGCACCAGAACTTCTCCTCGCACTACCGGGCCACAATCGGCGTGGACTTCGC
GCTCAAGGTGCTCCACTGGGACCCGGAGACTGTGGTGCGCCTGCAGCTCTGGGATATCGCAGGTCAAGAA
AGATTTGGAACATGACGAGGGTCTATTACCGAGAAGCTATGGGTGCATTTATTGTCTTCGATGTCACCA
GGCCAGCCACATTTGAAGCAGTGCCAAAGTGGAAAAATGATTGGACTCCAAGTTAAGTCTCCCTAATGG
CAAACCGGTTTCAGTGGTTTTGTTGGCCAACAAATGTGACCAGGGGAAGGATGTGCTCATGAACAATGGC
CTCAAGATGGACCAGTTCTGCAAGGAGCACGGTTTCGTAGGATGGTTTGAACATCAGCAAAGGAAAATA
TAAACATTGATGAAGCCTCCAGATGCCTGGTGAACACATACTTGCAAATGAGTGTGACCTAATGGAGTC
TATTGAGCCGGACGTCGTGAAGCCCATCTCACATCAACCAAGGTTGCCAGCTGCTCTGGCTGTGCCAAA
TCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG202196 representing NM_022337
Red=Cloning site Green=Tags(s)

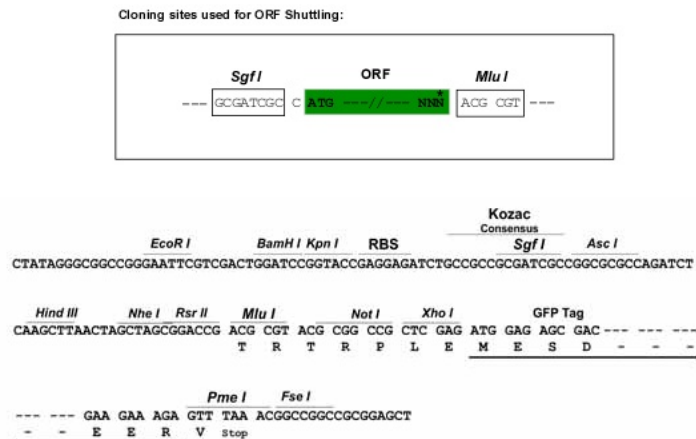
MQAPHKEHLKLLVIGDLGVGKTSIIKRYVHQNFSSHYRATIGVDFALKVLHWPETVVRLQLWDIAGQE
RFGNMTRVYYREAMGAFIVFDVTRPATFEAVAKWKNLDSKLSLPGKPVSVLLANKCDQKDVLMNNG
LKMDQFCKEHGFVGFETSAKENINIDEASRCLVKHILANECDLMESIEPDVVKPHLTSTKVASCSGCAK
S

TRTRPLE - GFP Tag - V



Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_022337

ORF Size: 633 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:

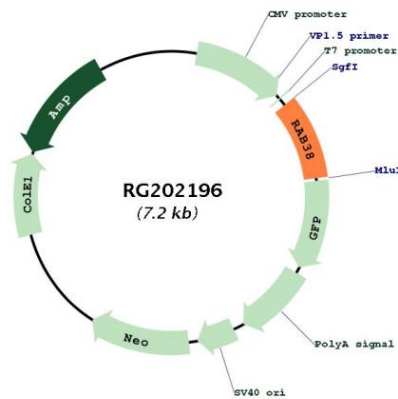
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store 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: [NM_022337.1](#), [NP_071732.1](#)

RefSeq Size:	1412 bp
RefSeq ORF:	636 bp
Locus ID:	23682
UniProt ID:	P57729
Cytogenetics:	11q14.2
Domains:	ras, RAN, RAS, RHO, RAB
Protein Families:	Druggable Genome
Gene Summary:	May be involved in melanosomal transport and docking. Involved in the proper sorting of TYRP1. Involved in peripheral melanosomal distribution of TYRP1 in melanocytes; the function, which probably is implicating vesicle-trafficcking, includes cooperation with ANKRD27 and VAMP7 (By similarity). Plays a role in the maturation of phagosomes that engulf pathogens, such as S.aureus and M.tuberculosis (PubMed:21255211). Plays an important role in the control of melanin production and melanosome biogenesis (PubMed:23084991). In concert with RAB32, regulates the proper trafficking of melanogenic enzymes TYR, TYRP1 and DCT/TYRP2 to melanosomes in melanocytes (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG202196