

Product datasheet for **RG228755**

RAB7B (NM_001164522) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: RAB7B (NM_001164522) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: RAB7B
Synonyms: RAB7
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG228755 representing NM_001164522
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAATCCCCGGAAGAAGGTGGACCTGAACTCATTATCGTCGGAGCCATTGGTGTGGAAAGACCTCCC
TCCTTCACCAATATGTGCACAAGACGTTTTATGAGGAATACCAGACCACACTGGGGCCAGCATCCTCTC
CAAGATTATCATATTGGGTGACACAACCTTTGAAGTTACAGATCTGGACACGGCGGTCCAGGACGGTTC
CGCTCCATGGTGTCCACGTTCTACAAGGGCTCCGATGGCTGCATCCTAGCTTTTGTATGTCACCGACCTGG
AGTCTTTTGAAGCCCTGGATATCTGGCGGGGTGATGTCCTGGCCAAGATTGCCCATGGAGCAGTCCTA
CCCCATGGTGTGTTGGGGAACAAGATCGATCTGGCAGACCGGAAGGTACCCAGGAAGTAGCTCAAGGC
TGGTGTAGAGAGAAAGATATTCCTTACTTTGAAGTCAGTGCCAAGAATGCATCAATGTGGTGCAAGCGT
TTGAGATGCTGGCCAGTAGGGCTCTGTCGAGGTACCAGAGCATCTTAGAAAATCACCTCACAGAATCCAT
CAAGCTCTCGCCAGACCAGTCAAGGAGCAGATGCTGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG228755 representing NM_001164522
 Red=Cloning site Green=Tags(s)

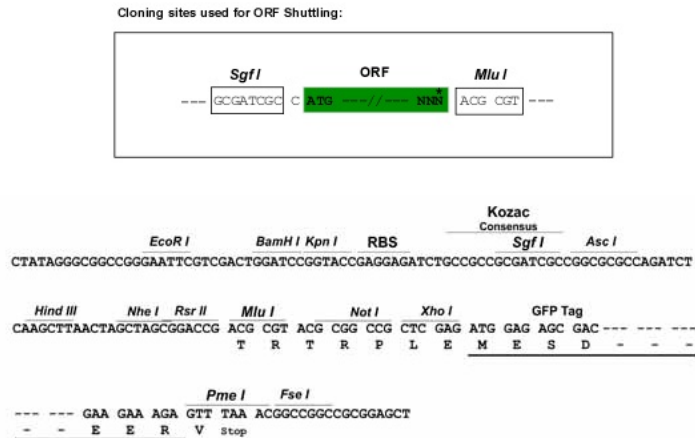
MNPRKKVDLKLIIVGAIGVGKTSLLHQYVHKTFYEEYQTTLGASILSKIIILGDTTLKLQIWDTGGERF
RSMVSTFYKGSDCILAFDVTDLSEFALDIWRGDVLAKIVPMEQSYPMVLLGNKIDLADRKVPQEAQG
WCREKDIPYFEVSAKNDINVVQAFEMLASRALSRYSILENHLSIKLSPDQSRSRCC

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



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Cloning Scheme:

Plasmid Map:


ACCN: NM_001164522

ORF Size: 597 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_001164522.3](#)

RefSeq Size: 2958 bp

RefSeq ORF: 600 bp

Locus ID: 338382

UniProt ID: [Q96AH8](#)

Cytogenetics: 1q32.1

Protein Families: Druggable Genome

Gene Summary: Controls vesicular trafficking from endosomes to the trans-Golgi network (TGN). Acts as a negative regulator of TLR9 signaling and can suppress TLR9-triggered TNFA, IL6, and IFNB production in macrophages by promoting TLR9 lysosomal degradation. Also negatively regulates TLR4 signaling in macrophages by promoting lysosomal degradation of TLR4. Promotes megakaryocytic differentiation by increasing NF-kappa-B-dependent IL6 production and subsequently enhancing the association of STAT3 with GATA1. Not involved in the regulation of the EGF- and EGFR degradation pathway.[UniProtKB/Swiss-Prot Function]