

# **Product datasheet for RG202283**

## RAB7B (NM\_177403) Human Tagged ORF Clone

### **Product data:**

**Product Type:** Expression Plasmids

Product Name: RAB7B (NM\_177403) Human Tagged ORF Clone

Tag: TurboGFP

Symbol: RAB7B

Synonyms: RAB7

Mammalian Cell Neomycin

Selection:

**Vector:** pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >RG202283 representing NM\_177403

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGAATCCCCGGAAGAAGGTGGACCTGAAACTCATTATCGTCGGAGCCATTGGTGTGGGAAAGACCTCCC
TCCTTCACCAATATGTGCACAAGACGTTTTATGAGGAATACCAGACCACACTGGGGGCCAGCATCCTCTC
CAAGATTATCATATTGGGTGACACAACTTTGAAGTTACAGATCTGGGACACGGGCGGTCAGGAGCGGTTC
CGCTCCATGGTGTCCACGGTTCTACAAGGGCTCCGATGGCTGCATCCTAGCTTTTGATGTCACCGACCTGG
AGTCTTTTGAAGCCCTGGATATCTGGCGGGGTGATGTCCTGGCCAAGATTGTCCCCATGGAGCAGTCCTA
CCCCATGGTGTTGTTGGGGAACAAGATCGATCTGGCAGACCGGAAGGTACCCCAGGAAGTAGCTCAAGGC
TGGTGTAGAGAGAAAGATATTCCTTACTTTGAAGTCAGTGCCAAGAATGACATCAATGTGGTGCAAGCGT
TTGAGATGCTGGCCAGTAGGGCTCTGTCGAGGTACCAGAGCATCTTAGAAAATCACCTCACAGAATCCAT

CAAGCTCTCGCCAGACCAGTCAAGGAGCAGATGCTGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG202283 representing NM\_177403

Red=Cloning site Green=Tags(s)

MNPRKKVDLKLIIVGAIGVGKTSLLHQYVHKTFYEEYQTTLGASILSKIIILGDTTLKLQIWDTGGQERF RSMVSTFYKGSDGCILAFDVTDLESFEALDIWRGDVLAKIVPMEQSYPMVLLGNKIDLADRKVPQEVAQG

WCREKDIPYFEVSAKNDINVVQAFEMLASRALSRYQSILENHLTESIKLSPDQSRSRCC

TRTRPLE - GFP Tag - V

**Restriction Sites:** Sgfl-Mlul



**OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

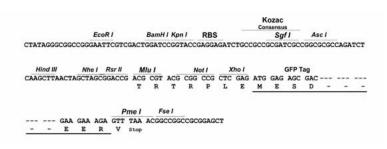
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#### **Cloning Scheme:**





**ACCN:** NM\_177403

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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with

0.22um filter is required.

**RefSeq:** NM 177403.5

RefSeq Size: 2330 bp RefSeq ORF: 600 bp Locus ID: 338382



UniProt ID: Q96AH8

Cytogenetics: 1q32.1

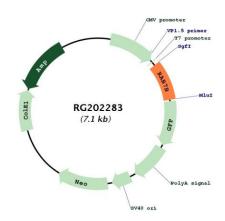
**Protein Families:** Druggable Genome

**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]

### **Product images:**



Circular map for RG202283