

## Product datasheet for **RC228755**

### **RAB7B (NM\_001164522) Human Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	RAB7B
Synonyms:	RAB7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

**ORF Nucleotide Sequence:** >RC228755 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAATCCCCGGAAGAAGGTGGACCTGAACTCATTATCGTCGGAGCCATTGGTGTGGGAAAGACCTCCC  
TCCTTCACCAATATGTGCACAAGACGTTTTATGAGGAATACCAGACCACACTGGGGGCCAGCATCCTCTC  
CAAGATTATCATATTGGGTGACACAACCTTTGAAGTTACAGATCTGGGACACGGCGGTCCAGGAGCGGTTT  
CGCTCCATGGTGTCCACGTTCTACAAGGGCTCCGATGGCTGCATCCTAGCTTTTGATGTCACCGACCTGG  
AGTCTTTTGAAGCCCTGGATATCTGGCGGGGTGATGTCTGGCCAAGATTGTCCCATGGAGCAGTCCTA  
CCCCATGGTGTGTTGGGGAACAAGATCGATCTGGCAGACCGGAAGGTACCCAGGAAGTAGCTCAAGGC  
TGGTGTAGAGAGAAAGATATTCCTTACTTTGAAGTCAGTGCCAAGAATGACATCAATGTGGTGAAGCGT  
TTGAGATGCTGGCCAGTAGGGCTCTGTGAGGTACCAGAGCATCTAGAAAATCACCTCACAGAATCCAT  
CAAGCTCTCGCCAGACCAAGTCAAGGAGCAGATGCTGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC228755 protein sequence  
Red=Cloning site Green=Tags(s)

MNPRKKVDLKLIIVGAIGVGKTSLLHQYVHKTFYEEYQTTLGASILSKIIILGDTTLKLQIWDTGQERF  
RSMVSTFYKSDGCILAFDVTDLSEFALDIWRGDVLAKIVPMEQSYPMVLLGNKIDLADRKVPQVEVAQG  
WCREKDIPYFEVSAKNDINVVQAFEMLASRALSRYSILENHLTESIKLSPDQSRSRCC

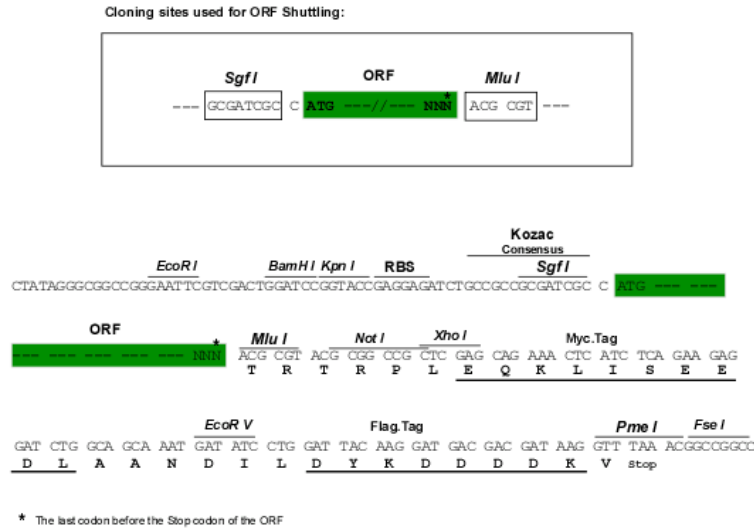
**TR**TRPLEQKLI**SEEDLAANDILDYKDDDDKV**



**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6539\\_g03.zip](https://cdn.origene.com/chromatograms/mk6539_g03.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**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.

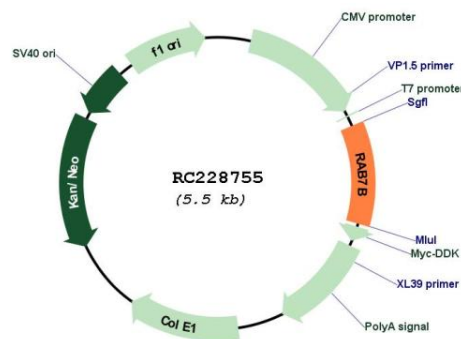
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:**

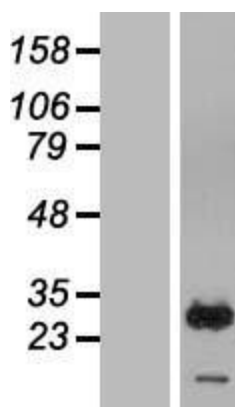
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<u>NM_001164522.3</u>
<b>RefSeq Size:</b>	2958 bp
<b>RefSeq ORF:</b>	600 bp
<b>Locus ID:</b>	338382
<b>UniProt ID:</b>	<u>Q96AH8</u>
<b>Cytogenetics:</b>	1q32.1
<b>Protein Families:</b>	Druggable Genome
<b>MW:</b>	22.5 kDa
<b>Gene Summary:</b>	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]

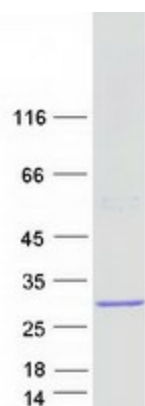
## Product images:



Circular map for RC228755



Western blot validation of overexpression lysate (Cat# [LY431783]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC228755 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RAB7B protein (Cat# [TP328755]). The protein was produced from HEK293T cells transfected with RAB7B cDNA clone (Cat# RC228755) using MegaTran 2.0 (Cat# [TT210002]).