

## Product datasheet for MR227658

### Rap1b (NM\_024457) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Rap1b (NM\_024457) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Rap1b  
**Synonyms:** 2810443E11Rik  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >MR227658 representing NM\_024457  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGCGTGAATATAAGCTCGTCGTGCTTGGATCAGGAGGCGTTGGGAAGTCAGCCCTGACTGTACAGTTTG  
 TTCAAGGAATTTTTGTTGAAAAATATGATCCTACGATAGAAGATTCTTATAGAAAGCAAGTTGAAGTAGA  
 TGCACAGCAGTGTATGCTTGAATCTTGGACACTGCAGGAACGGAGCAATTCACAGCCATGAGGGACCTG  
 TACATGAAGAACGACAAGGCTTCGCTCGTTTACTCCATCACAGCACAGTCGACATTTAACGACTTAC  
 AAGATCTAAGAGAGCAGATTCTGCGGGTAAAGACTGATGATGTTCCAATGATTCTGGTTGGCAATAA  
 ATGCGACTTGGAAGATGAAAGAGTTGTAGGAAAGGAACAAGTTCAGAACCCTAGCAAGACAGTGGAACAAC  
 TGTGCATTCTTAGAATCCTCTGCAAAGTCCAAAATAAATGTTAATGAGATCTTTTATGACCTAGTGCGGC  
 AAATTAACAGAAAACTCCAGTGCTGGGAAGGCCCGAAAAAGTCATCGTGTCAGCTGCTT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR227658 representing NM\_024457  
 Red=Cloning site Green=Tags(s)

MREYKLVVLGSGGVGKSALTVQFVQGI FVEKYDPTIEDSYRKQVEVDAQQCML EILD TAGTEQFTAMRDL  
 YMKNGQGFALVYSITAQSTFNDLQDLREQILRVKDTDDVPMILVGNKCDLEDERVVGKEQGQNLARQWNN  
 CAFLESSAKSKINVNEIFYDLVRQINRKTPVPGKARKKSSCQLL

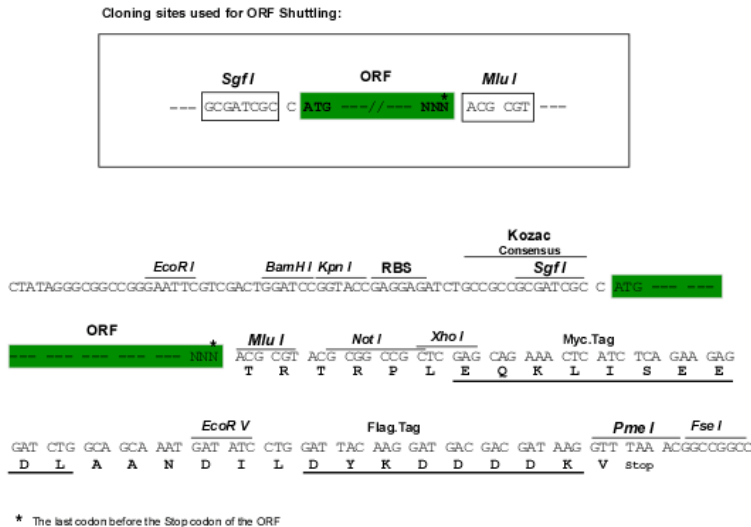
**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mm9044\\_c04.zip](https://cdn.origene.com/chromatograms/mm9044_c04.zip)



Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_024457

ORF Size: 552 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\\_024457.2](#), [NP\\_077777.1](#)

RefSeq Size: 1937 bp

RefSeq ORF: 555 bp

Locus ID: 215449

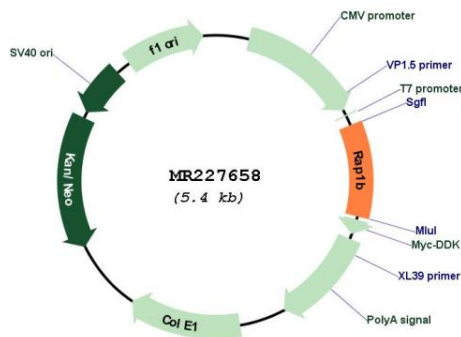
UniProt ID: [Q99J16](#)

**Cytogenetics:** 10 D2

**MW:** 21.3 kDa

**Gene Summary:** GTP-binding protein that possesses intrinsic GTPase activity. Contributes to the polarizing activity of KRIT1 and CDH5 in the establishment and maintenance of correct endothelial cell polarity and vascular lumen. Required for the localization of phosphorylated PRKCZ, PARD3 and TIAM1 to the cell junction. Plays a role in the establishment of basal endothelial barrier function (By similarity).[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR227658