

## Product datasheet for MR201667

### Rap2b (NM\_028712) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Rap2b (NM\_028712) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Rap2b  
**Synonyms:** 4021402C18Rik; AA408554  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >MR201667 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGAGAGAGTACAAAGTGGTGGTACTGGGCTCGGGCGGCGTGGGCAAGTCCGCGCTCACCGTGCAGTTCCG  
 TAACAGGTTCTTCATCGAGAAGTACGACCCGACCATCGAGGACTTTTACCGCAAGGAGATCGAGGTGGA  
 CTCGTCGCGGTCGGTCTGGAGATCTTGGACACCGGGCACGGAGCAGTTCCGCTCAATGCGGGACCTG  
 TACATCAAGAATGGCCAGGGCTTATTCTCGTCTACAGCCTGGTCAACCAGCAGAGCTTCCAGGACATCA  
 AGCCCATGCGGGACCAGATCATCCGCTGAAGCGGTACGAGCGGTACCCATGATCCTGGTAGGCAACAA  
 GGTGGACTTGGAGGTGAACGTGAGGTCTCTATGGCGAGGGTAAGGCCCTGGCCGAGGAGTGGAGCTGC  
 CCCTTCATGGAGACATCGGCCAAAAACAAAGCCTCAGTGGATGAGCTATTCGAGAGATCGTGAGGCAGA  
 TGAACACGCGGCACAGCCCAACGGCGACGAGGGCTGCTGCTCGGCTGCGTGATCCTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR201667 protein sequence  
 Red=Cloning site Green=Tags(s)

MREYKVVVLGSGGVGKSALTVQFVTGSFIEKYDPTIEDFYRKEIEVDSSPSVLEILDTAGTEQFASMRDL  
 YIKNGQGFILVYSLVNQSFQDIKPMRDQIRVKRYERVPMLVGNKVDLEGEREVSYGEGKALAEWESC  
 PFMETSAKNKASVDELFAEIVRQMNYAAQPNGDEGCSACVIL

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** Sgfl-MluI



**Cloning Scheme:**


**ACCN:** NM\_028712

**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\\_028712.4](#), [NP\\_082988.1](#)

**RefSeq Size:** 4197 bp

**RefSeq ORF:** 552 bp

**Locus ID:** 74012

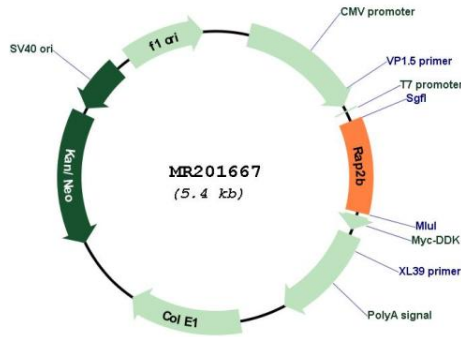
**UniProt ID:** [P61226](#)

**Cytogenetics:** 3 E1

**MW:** 20.5 kDa

**Gene Summary:** Small GTP-binding protein which cycles between a GDP-bound inactive and a GTP-bound active form. Involved in EGFR and CHRM3 signaling pathways through stimulation of PLCE1. May play a role in cytoskeletal rearrangements and regulate cell spreading through activation of the effector TNIK. May regulate membrane vesiculation in red blood cells. [UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR201667