

## Product datasheet for **RC204287**

### RAP2B (NM\_002886) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** RAP2B (NM\_002886) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** RAP2B  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC204287 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGAGAGAGTACAAAGTGGTGGTCTGGGCTCGGGCGCGTGGGCAAGTCCGCGCTACCGTGCAGTTCC  
 TGACGGGCTCCTTCATCGAGAAGTACGACCCGACCATCGAAGACTTTACCGCAAGGAGATTGAGGTGGA  
 CTCGTCGCGCTCGGTGCTGGAGATCCTGGATACGGCGGGCACCAGCAGTTCGCGTCCATGCGGGACCTG  
 TACATCAAGAACGGCCAGGGCTTCATCCTGGTCTACAGCCTCGTCAACCAGCAGAGCTCCAGGACATCA  
 AGCCCATGCGGGACCAGATCATCCGCGTGAAGCGGTACGAGCGGTGCCATGATCCTGGTGGGCAACAA  
 GGTGGACCTGGAGGGTGAAGCGCGAGGTCTCGTACGGGGAGGGCAAGGCCCTGGCTGAGGAGTGGAGCTGC  
 CCCTTCATGGAGACGTCGGCCAAAAACAAAGCCTCGGTAGACGAGCTATTTGCCGAGATCGTGGCGAGA  
 TGAACACGCGCGCAGCCCAACGGCGATGAGGCTGCTGCTCGGCTGCGTGATCCTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC204287 protein sequence  
 Red=Cloning site Green=Tags(s)

MREYKVVVLGSGGVGKSALTVQFVTGSFIEKYDPTIEDFYRKEIEVDSSPSVLEILDAGTEQFASMRDL  
 YIKNGQGFILVYSLVNQQSFDIKPMRDQIIRVKRYERVPMLVGNKVDLEGEREVSYGEGKALAEWESC  
 PFMETSAKNKASVDELFAEIVRQMNYAAQPNGDEGCCSACVIL

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

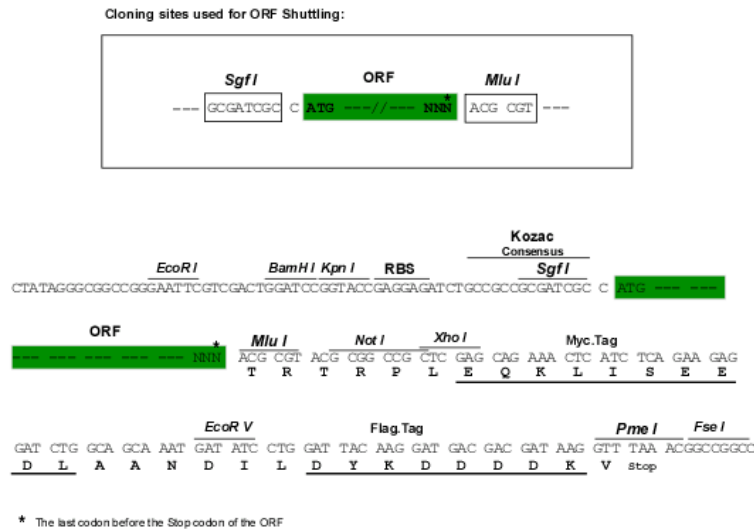
**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6430\\_f03.zip](https://cdn.origene.com/chromatograms/mk6430_f03.zip)

**Restriction Sites:** Sgfl-Mlul



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## Cloning Scheme:



ACCN: NM\_002886

ORF Size: 549 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\\_002886.4](#)

RefSeq Size: 8413 bp

RefSeq ORF: 552 bp

Locus ID: 5912

UniProt ID: [P61225](#)

Cytogenetics: 3q25.2

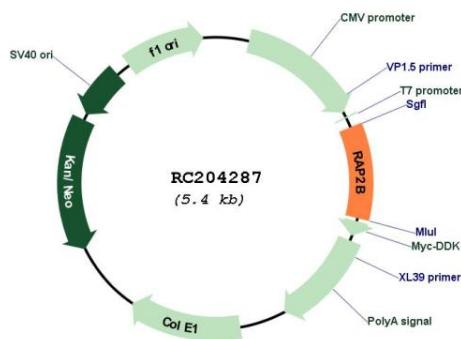
**Domains:** ras, RAS, RHO, RAB

**Protein Families:** Druggable Genome

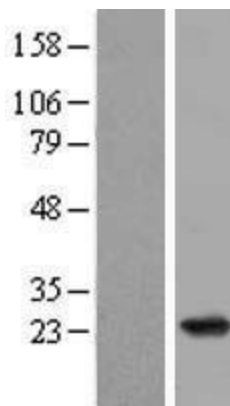
**MW:** 20.5 kDa

**Gene Summary:** This intronless gene belongs to a family of RAS-related genes. The proteins encoded by these genes share approximately 50% amino acid identity with the classical RAS proteins and have numerous structural features in common. The most striking difference between the RAP and RAS proteins resides in their 61st amino acid: glutamine in RAS is replaced by threonine in RAP proteins. Evidence suggests that this protein may be polyisoprenylated and palmitoylated. [provided by RefSeq, Jul 2008]

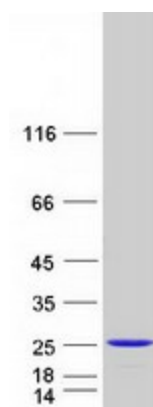
**Product images:**



Circular map for RC204287



Western blot validation of overexpression lysate (Cat# [LY419033]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204287 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RAP2B protein (Cat# [TP304287]). The protein was produced from HEK293T cells transfected with RAP2B cDNA clone (Cat# RC204287) using MegaTran 2.0 (Cat# [TT210002]).