

Product datasheet for **RC221793**

RAP1B (NM_001010942) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: RAP1B (NM_001010942) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: RAP1B
Synonyms: K-REV; RAL1B
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC221793 representing NM_001010942
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCGTGAGTATAAGCTAGTCGTTCTTGGCTCAGGAGCGTTGGAAAGTCTGCTTTGACTGTACAATTTG
TTCAAGGAATTTTGTAGAAAAATACGATCCTACGATAGAAGATTCTTATAGAAAGCAAGTTGAAGTAGA
TGCACAACAGTGTATGCTTGAATCTTGGATACTGCAGGAACGGAGCAATTTACAGCAATGAGGGATTTA
TACATGAAAAATGGACAAGGATTTGCATTAGTTTATTCCATCACAGCACAGTCCACATTTAACGATTTAC
AAGACCTGAGAGAACAGATTCTTCGAGTTAAAGACTGATGATGTTCCAATGATTCTTGTGGTAATAA
GTGTGACTTGGAAAGATGAAAGAGTTGTAGGAAGGAACAAGGTCAAATCTAGCAAGACAATGGAACAAC
TGTGCATTCTTAGAATCTTCTGCAAAATCAAAAATAAATGTTAATGAGATCTTTTATGACCTAGTGCCGGC
AAATTAACAGAAAACTCCAGTGCTCGGAAGGCTCGAAAAAGTCATCATGTCAGCTGCTT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC221793 representing NM_001010942
Red=Cloning site Green=Tags(s)

MREYKLVVLGSGGVGKLSALTVQFVQGI FVEKYDPTIEDSYRKQVEVDAQQCML EILD TAGTEQFTAMRDL
YMKNGQGFALVYSITAQSTFNLDLREQILRVKDTDDVPMILVGNKCDLEDERVVGKEQGQNLARQWNN
CAFLESSAKSKINVNEIFYDLVRQINRKPVP GKARKKSSCQLL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6036_d04.zip



Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001010942

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_001010942.3](#)

RefSeq Size: 2117 bp

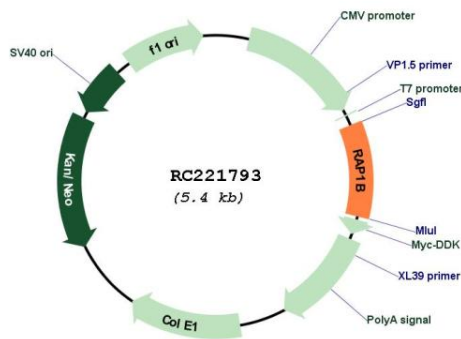
RefSeq ORF: 555 bp

Locus ID: 5908

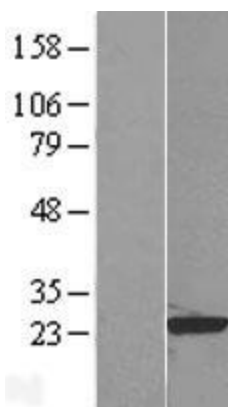
UniProt ID: [P61224](#)

Cytogenetics:	12q15
Protein Families:	Druggable Genome
Protein Pathways:	Chemokine signaling pathway, Focal adhesion, Leukocyte transendothelial migration, Long-term potentiation, MAPK signaling pathway, Neurotrophin signaling pathway, Renal cell carcinoma
MW:	20.6 kDa
Gene Summary:	This gene encodes a member of the RAS-like small GTP-binding protein superfamily. Members of this family regulate multiple cellular processes including cell adhesion and growth and differentiation. This protein localizes to cellular membranes and has been shown to regulate integrin-mediated cell signaling. This protein also plays a role in regulating outside-in signaling in platelets. Alternate splicing results in multiple transcript variants. Pseudogenes of this gene are found on chromosomes 3, 5, 6 and 9. [provided by RefSeq, Oct 2011]

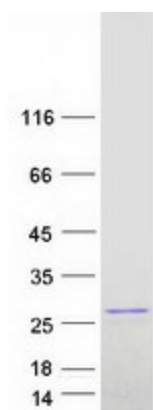
Product images:



Circular map for RC221793



Western blot validation of overexpression lysate (Cat# [LY423244]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221793 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RAP1B protein (Cat# [TP321793]). The protein was produced from HEK293T cells transfected with RAP1B cDNA clone (Cat# RC221793) using MegaTran 2.0 (Cat# [TT210002]).