

## Product datasheet for **RC203325**

### **RAC3 (NM\_005052) Human Tagged ORF Clone**

#### Product data:

Product Type: Expression Plasmids  
 Product Name: RAC3 (NM\_005052) Human Tagged ORF Clone  
 Tag: Myc-DDK  
 Symbol: RAC3  
 Mammalian Cell Selection: Neomycin  
 Vector: pCMV6-Entry (PS100001)  
 E. coli Selection: Kanamycin (25 ug/mL)  
 ORF Nucleotide Sequence: >RC203325 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCC**CGCATCGCC**

ATGCAGGCCATCAAGTGCCTGGTGGTGGTGGGACGGCGCCGTGGGGAAGACATGCTTGCTGATCAGCTACACGACCAACGCCTTCCCGGAGAGTACATCCCCACCGTTTTTGACAACACTCTGCCAACGTGATGGTGACGGAAACCAGTCAACTTGGGGCTGTGGGACACAGCGGGTCAGGAGGACTACGATCGGCTGCGGCCACTCTCTACCCCAAACACTGACGTCTTTCTGATCTGCTTCTCTCTGGTGAGCCCGGCCCTCTTCGAGAATGTTCTGTGCCAAGTGGTACCCGGAGGTGCGGCACCACTGCCCCACAGCCCATCCTCCTGGTGGGACCAAGTGGACCTCCGCGACGACAAGGACACCAATTGAGCGGCTGCGGGACAAGAAGCTGGCACCCATCACCTACCCACAGGGCCTGGCCATGGCCCGGGAGATTGGCTCTGTGAAATACCTGGAGTGCTCAGCCCTGACCCAGCGGGCCTGAAGACAGTGTTTGACGAGCGATCCGCGCGGTGCTCTGCCCGCCCCAGTGAAGAAGCCGGGGAA GAAGTGCACCGTCTTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC203325 protein sequence  
 Red=Cloning site Green=Tags(s)

MQAIKCVVVGDAVGKTCLLISYTTNAFPGEYIPTVFDNYSANVMVDGKPVNLGLWDTAGQEDYDRLRPLSYPQTDVFLICFSLVSPASFENVRAKWYPEVRHHCPTHPILLVGTKLDLRDDKDTIERLRDCKLAPITYPQGLAMAREIGSVKYLECSALTQRGLKTVFDEAIRAVLCPVPVKKPGKKCTVF

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

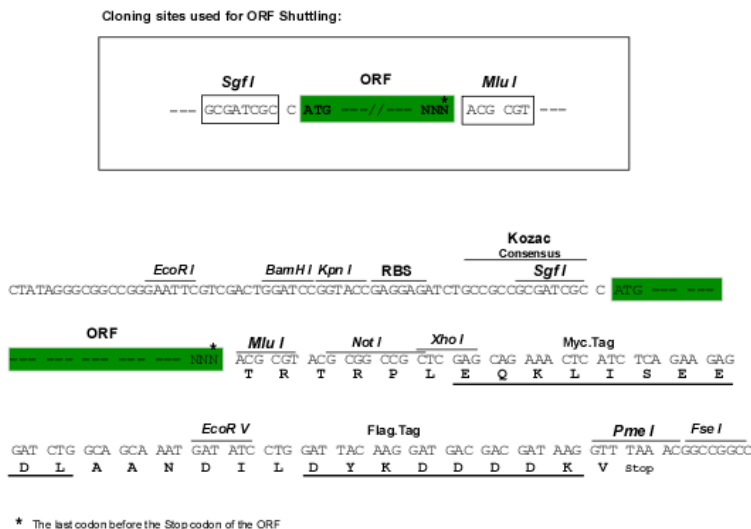
Chromatograms: [https://cdn.origene.com/chromatograms/mk6146\\_g09.zip](https://cdn.origene.com/chromatograms/mk6146_g09.zip)



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**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_005052

**ORF Size:** 576 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\\_005052.3](#)

**RefSeq Size:** 1077 bp

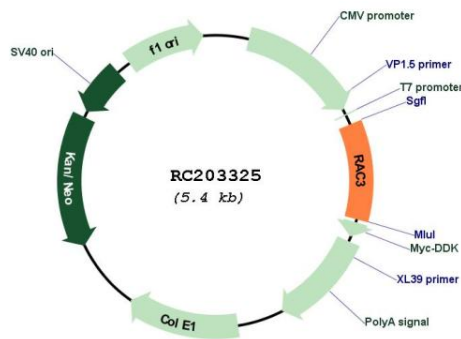
**RefSeq ORF:** 579 bp

**Locus ID:** 5881

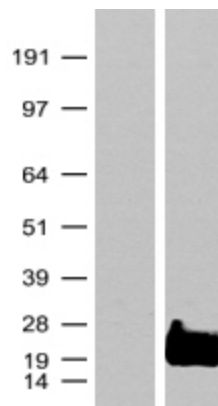
**UniProt ID:** [P60763](#)

<b>Cytogenetics:</b>	17q25.3
<b>Domains:</b>	ras, RAS, RHO, RAB
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Adherens junction, Axon guidance, B cell receptor signaling pathway, Colorectal cancer, Fc epsilon RI signaling pathway, Focal adhesion, MAPK signaling pathway, Natural killer cell mediated cytotoxicity, Pancreatic cancer, Pathways in cancer, Regulation of actin cytoskeleton, VEGF signaling pathway, Viral myocarditis, Wnt signaling pathway
<b>MW:</b>	21.4 kDa
<b>Gene Summary:</b>	The protein encoded by this gene is a GTPase which belongs to the RAS superfamily of small GTP-binding proteins. Members of this superfamily appear to regulate a diverse array of cellular events, including the control of cell growth, cytoskeletal reorganization, and the activation of protein kinases. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Oct 2015]

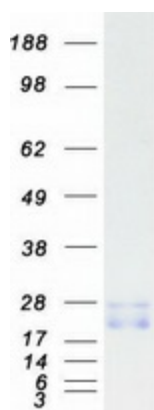
### Product images:



Circular map for RC203325



Western blot validation of overexpression lysate (Cat# [LY401565]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203325 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RAC3 protein (Cat# [TP303325]). The protein was produced from HEK293T cells transfected with RAC3 cDNA clone (Cat# RC203325) using MegaTran 2.0 (Cat# [TT210002]).