

## Product datasheet for **RG203325**

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

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** RAC3 (NM\_005052) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** RAC3  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG203325 representing NM\_005052  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCAGGCCATCAAGTGCCTGGTGGTCGGCGACGGCGCCGTGGGAAGACATGCTTGCTGATCAGCTACA  
CGACCAACGCCTTCCCGGAGAGTACATCCCAACCGTTTTGACAACACTCTGCCAACGTGATGGTGA  
CGGAAACCACTCAACTTGGGGCTGTGGGACACAGCGGTGAGGAGACTACGATCGGCTGCGGCCACTC  
TCCTACCCCAAACTGACGTCTTTCTGATCTGCTTCTCTCTGGTGAGCCCGCCCTCTCGAGAATGTT  
GTGCCAAGTGGTACCGGAGGTGCGGCACCACTGCCCCACACGCCATCCTCCTGGTGGCACCACCAAGT  
GGACCTCCGCGACGACAAGGACACCATTGAGCGGCTGCGGGACAAGAAGCTGGCACCCATCACCTACCCA  
CAGGGCCTGGCCATGGCCCGGAGATTGCTCTGTGAAATACCTGGAGTGCTCAGCCCTGACCCAGCGGG  
GCCTGAAGACAGTGTGGACGAGCGATCCGCGCGGTGCTCTGCCCGCCCAAGTGAAGAAGCCGGGAA  
GAAGTGCACCGTCTTC

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:** >RG203325 representing NM\_005052  
**Red=Cloning site Green=Tags(s)**

MQAIKCVVVDGAVGKTCLLISYTTNAFPGEYIPTVFDNYSANVMVDGKPVNLGLWDTAGQEDYDRLRPL  
SYPQTDVFLICFSLVSPASFENVRKWYPEVRHHCPTHPILLVGTKLDLRDDKDTIERLRDCKLAPITYP  
QGLAMAREIGSVKYLECSALTQRGLKTVFDEAIRAVLCPPPVKKPGKKCTVF

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** Sgfl-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](#)

**Cytogenetics:** 17q25.3

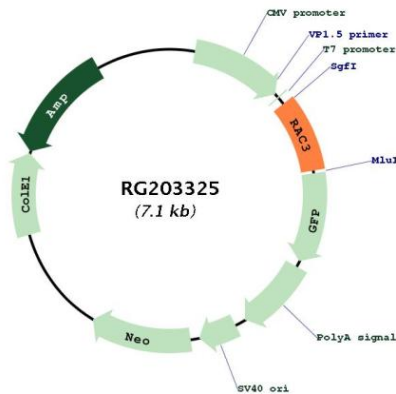
**Domains:** ras, RAS, RHO, RAB

**Protein Families:** Druggable Genome

**Protein Pathways:** 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

**Gene Summary:** 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 RG203325