

## Product datasheet for MR223529

### Rac3 (NM\_133223) Mouse Tagged ORF Clone

#### Product data:

Product Type: Expression Plasmids  
 Product Name: Rac3 (NM\_133223) Mouse Tagged ORF Clone  
 Tag: Myc-DDK  
 Symbol: Rac3  
 Synonyms: Rac1B  
 Mammalian Cell Selection: Neomycin  
 Vector: pCMV6-Entry (PS100001)  
 E. coli Selection: Kanamycin (25 ug/mL)  
 ORF Nucleotide Sequence: >MR223529 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCCGCATCGCC

ATGCAAGCCATCAAGTGCCTGGTGGTGGCGATGGTGCCGTGGGAAGACGTGCCTGCTGATCAGCTACA  
 CGACCAACGCCTCCCAGGAGAATATATCCCCACAGTTTTTCGACAACACTCAGCCAACGTGATGGTGA  
 TGGGAAGCCAGTTAACCTGGGGCTGTGGACACTGCTGCCAGGAAGACTACGATAGGCTTCGGCCACTC  
 TCCTATCCTCAAACAGATGTCTTCTGATCTGCTTCTCCCTGGTGAGCCAGCCTCCTTTGAGAATGTCC  
 GTGCCAAGTGGTACCCAGAGGTGCGGCACCACTGCCACACACACCCATCCTTCTGGTGGGCACCAAGCT  
 GGACCTCCGTGATGACAAGGATACGATTGAACGGCTGCGGGACAAGAAGCTGGCACCATAACCTACCCC  
 CAAGGCCTGGCCATGGCCCGAGAGATTGGTCCGTCAAGTACCTGGAGTGCTCAGCTCTGACCCAGAGAG  
 GTCTGAAGACAGTGTTCGACGAGGCCATCCGGGCTGTGCTCTGCCACCTCCAGTGAAAAAGCCAGGCAA  
 GAAGTGCCTGTATTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR223529 protein sequence  
 Red=Cloning site Green=Tags(s)

MQAIKCVVVDGAVGKTCLLISYTTNAFPGEYIPTVFDNYSANVMVDGKPVNGLWDTAGQEDYDRLRPL  
 SYPQTDVFLICFSLVSPASFENVRKWPYEVRRHCPHTPILLVGTKLDRDDKDTIERLRDKKLAPITYP  
 QGLAMAREIGSVKYLECSALTQRGLKTVFDEAIRAVLCPPPVKKPGKKCTVF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_133223

ORF Size: 579 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\\_133223.4](#), [NP\\_573486.1](#)

RefSeq Size: 1078 bp

RefSeq ORF: 579 bp

Locus ID: 170758

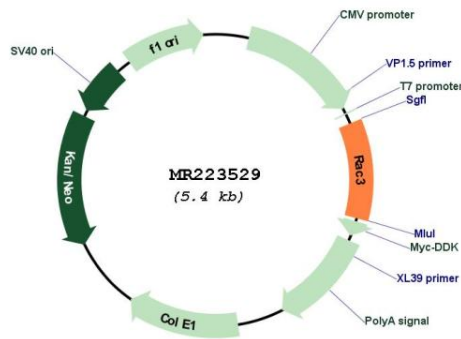
UniProt ID: [P60764](#)

**Cytogenetics:** 11 E2

**MW:** 21.4 kDa

**Gene Summary:** Plasma membrane-associated small GTPase which cycles between an active GTP-bound and inactive GDP-bound state. In active state binds to a variety of effector proteins to regulate cellular responses, such as cell spreading and the formation of actin-based protusions including lamellipodia and membrane ruffles. Promotes cell adhesion and spreading on fibrinogen in a CIB1 and alpha-IIb/beta3 integrin-mediated manner (By similarity). [UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR223529