

Product datasheet for **MG223529**

Rac3 (NM_133223) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Rac3 (NM_133223) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Rac3
Synonyms: Rac1B
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG223529 representing NM_133223
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATCGAGGCCATCAAGTGCCTGGTGGTGGCGATGGTGCCGTGGGAAGACGTGCCTGCTGATCAGCTACA
 CGACCAACGCCTCCCAGGAGAATATATCCCCACAGTTTTTCGACAACACTCAGCCAACGTGATGGTGA
 TGGGAAGCCAGTTAACCTGGGGCTGTGGGACACTGCTGGCCAGGAAGACTACGATAGGCTTCGGCCACTC
 TCCTATCCTCAAACAGATGTCTTCTGATCTGCTTCTCCCTGGTGGAGCCAGCCTCCTTTGAGAATGTCC
 GTGCCAAGTGGTACCCAGAGGTGCGGCACCACTGCCACACACACCCATCCTTCTGGTGGGCACCAAGCT
 GGACCTCCGTGATGACAAGGATACGATTGAACGGCTGCGGGACAAGAAGCTGGCACCATAACCTACCCC
 CAAGGCCTGGCCATGGCCCGAGAGATTGGTTCCGTCAAGTACCTGGAGTGCTCAGCTCTGACCCAGAGAG
 GTCTGAAGACAGTGTTCGACGAGGCCATCCGGGCTGTGCTCTGCCACCTCCAGTGAAAAAGCCAGGCAA
 GAAGTGCCTGTATTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG223529 representing NM_133223
 Red=Cloning site Green=Tags(s)

MQAIKCVVVDGAVGKTCLLISYTTNAFPGEYIPTVFDNYSANVMVDGKPVNLGLWDTAGQEDYDRLRPL
 SYPQTDVFLICFSLVSPASFENVRKWPVRRHCPHTPILLVGTKLDLRDDKDTIERLRDCKLAPITYP
 QGLAMAREIGSVKYLECSALTQRGLKTVFDEAIRAVLCPPPVKKPGKKCTVF

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



Cloning Scheme:


ACCN: NM_133223

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_133223.4](#), [NP_573486.1](#)

RefSeq Size: 1078 bp

RefSeq ORF: 579 bp

Locus ID: 170758

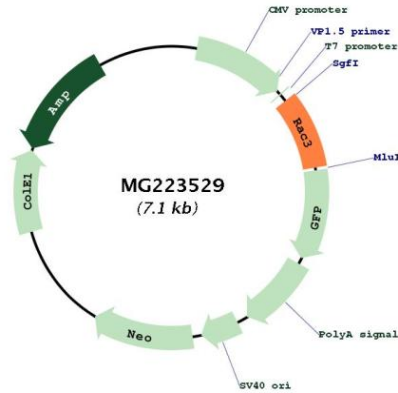
UniProt ID: [P60764](#)

Cytogenetics: 11 E2

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 MG223529