

Product datasheet for **SC124449**

RAC1 (NM_006908) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RAC1 (NM_006908) Human Untagged Clone
Tag:	Tag Free
Symbol:	RAC1
Synonyms:	MIG5; MRD48; p21-Rac1; Rac-1; TC-25
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_006908, the custom clone sequence may differ by one or more nucleotides

```
ATGCAGGCCATCAAGTGTGGTGGTGGGAGACGGAGCTGTAGGTAAAACCTGCCTACTGATCAGTTACA  
CAACCAATGCATTTCTGGAGAATATATCCCTACTGTCTTTGACAATTATTCTGCCAATGTTATGGTAGA  
TGGAAAACCGGTGAATCTGGGCTTATGGGATACAGCTGGACAAGAAGATTATGACAGATTACGCCCTA  
TCCTATCCGCAACAGATGTGTTCTTAATTTGCTTTTCCCTTGTGAGTCTGCATCATTTGAAAATGTCC  
GTGCAAAGTGGTATCCTGAGGTGCGGCACCACTGTCCCAACTCCCATCATCCTAGTGGGAACTAACT  
TGATCTTAGGGATGATAAAGACACGATCGAGAACTGAAGGAGAAGAAGCTGACTCCCATCACCTATCCG  
CAGGGTCTAGCCATGGCTAAGGAGATTGGTGTGTAATAACCTGGAGTGCTCGGCGCTCACACAGCGAG  
GCCTCAAGACAGTGTGTTGACGAAGCGATCCGAGCAGTCTCTGCCGCTCCCGTGAAGAAGAGGAGAG  
AAAATGCCTGCTGTTGTAA
```



[View online »](#)

5' Read Nucleotide Sequence:	>OriGene 5' read for NM_006908 unedited CCCCCCCCCCGCCNNCCNNCCCTTTCCCCCCCCCTTTTCANATTTGTATACGACTCC TATAGGCGGCCGCGNAATTCGCACCAGGTGGCCGCTGCCGGGCATCGGCTTCCAGTCCGC GGAGGGCGAGGCGGCGTGGACAGCGGCCCGGCACCCAGCGCCCCGCCCGCAAGCCG CGCGCCGTCCGCGCGCCCCGAGCCCGCCGCTTCTATCTCAGCGCCCTGCCGCCGCG CCGCGGCCAGCGAGCGCCCTGATGCAGGCCATCAAGTGTGTGGTGGTGGAGACGGAG CTGTAGGTAAAACTTGCCTACTGATCAGTTACACAACCAATGCATTTCCCTGGAGAAATA TCCTACTGTCTTGACAATTATTCTGCCAATGTTATGGTAGATGGAAAACCGGTGAATC TGGGCTTATGGGATACAGCTGGACAAGAAGATTATGACAGATTACGCCCCCTATCCTATC CGCAAACAGATGTGTTCTTAATTTGCTTTTCCCTTGTGAGTCCTGCATCATTTGAAAATG TCCGTGCAAAGTGGTATCCTGAGGTGCGGCACCACTGTCCCAACACTCCCATCATCTAG TGGAACTAAACTTGATCTTAGGGATGATAAAGACACGATCGAGAACTGAAGGAGAAGA AGCTGACTCCCATCACCTATCCGCAGGGTCTAGCCATGGCTAAGGAGATTGGTGTGTAA AATACCTGGAGTGCTCGGCGCTCACACAGCGAGGCCTCAAGACAGTGTGTTGACGAAGCGA TCCGAGCAGTCTCTGCCCGCTCCCGTGAAGAAGAGGAAGAGAAATGCCTGNNCTGTGT AATGTCTCAGCCCTTCGTTCTTTGTNCTGTCCTTTGNNACTTTGTACGCTTTGCTCAAAA AANAAAAAAT
Restriction Sites:	NotI-NotI
ACCN:	NM_006908
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<ol style="list-style-type: none"> 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_006908.3 , NP_008839.2
RefSeq Size:	2355 bp
RefSeq ORF:	579 bp
Locus ID:	5879
UniProt ID:	P63000
Cytogenetics:	7p22.1
Domains:	ras, RAS, RHO, RAB
Protein Families:	Druggable Genome

Protein Pathways:

Adherens junction, Amyotrophic lateral sclerosis (ALS), Axon guidance, B cell receptor signaling pathway, Chemokine signaling pathway, Colorectal cancer, Epithelial cell signaling in Helicobacter pylori infection, Fc epsilon RI signaling pathway, Fc gamma R-mediated phagocytosis, Focal adhesion, Leukocyte transendothelial migration, MAPK signaling pathway, Natural killer cell mediated cytotoxicity, Neurotrophin signaling pathway, Pancreatic cancer, Pathways in cancer, Regulation of actin cytoskeleton, Renal cell carcinoma, Toll-like receptor signaling pathway, 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. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2009]

Transcript Variant: This variant (Rac1) has a 57 bp in-frame deletion of exon 3b in the coding region, as compared to the variant Rac1b. Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.