

Product datasheet for RC208711L3

RAC1 (NM_006908) Human Tagged Lenti ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RAC1 (NM_006908) Human Tagged Lenti ORF Clone
Tag:	Myc-DDK
Symbol:	RAC1
Synonyms:	MIG5; MRD48; p21-Rac1; Rac-1; TC-25
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-Myc-DDK-P2A-Puro (PS100092)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC208711).
Restriction Sites:	SgfI-MluI
Cloning Scheme:	

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF.

ACCN:	NM_006908
ORF Size:	576 bp



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OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_006908.3](#)

RefSeq Size: 2341 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

MW: 21.5 kDa

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]