

## Product datasheet for RC200304L1

### RAC2 (NM\_002872) Human Tagged Lenti ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	RAC2 (NM_002872) Human Tagged Lenti ORF Clone
Tag:	Myc-DDK
Symbol:	RAC2
Synonyms:	EN-7; Gx; HSPC022; IMD73A; IMD73B; IMD73C; p21-Rac2
Mammalian Cell Selection:	None
Vector:	pLenti-C-Myc-DDK (PS100064)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC200304).
Restriction Sites:	Sgfl-MluI
Cloning Scheme:	

Cloning sites used for ORF Shuttling:



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

ACCN:	NM_002872
ORF Size:	576 bp



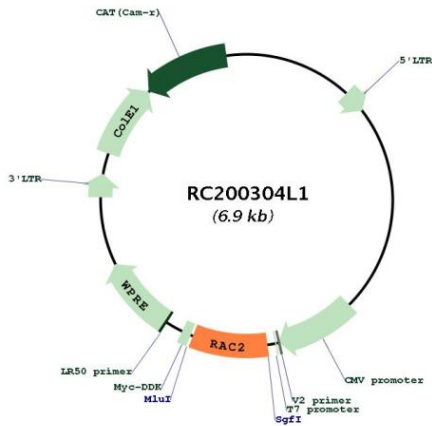
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<b>OTI Disclaimer:</b>	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability 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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_002872.4</a>
<b>RefSeq Size:</b>	1538 bp
<b>RefSeq ORF:</b>	579 bp
<b>Locus ID:</b>	5880
<b>UniProt ID:</b>	<a href="#">P15153</a>
<b>Cytogenetics:</b>	22q13.1
<b>Domains:</b>	ras, RAN, RAS, RHO, RAB
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Adherens junction, Axon guidance, B cell receptor signaling pathway, Chemokine signaling pathway, Colorectal cancer, Fc epsilon RI signaling pathway, Fc gamma R-mediated phagocytosis, Focal adhesion, Leukocyte transendothelial migration, 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
<b>MW:</b>	21.4 kDa

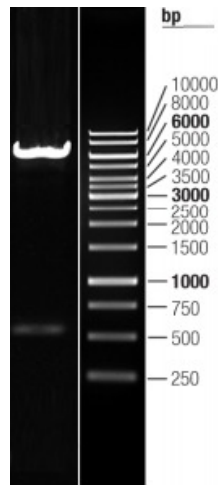
**Gene Summary:**

This gene encodes a member of the Ras superfamily of small guanosine triphosphate (GTP)-metabolizing proteins. The encoded protein localizes to the plasma membrane, where it regulates diverse processes, such as secretion, phagocytosis, and cell polarization. Activity of this protein is also involved in the generation of reactive oxygen species. Mutations in this gene are associated with neutrophil immunodeficiency syndrome. There is a pseudogene for this gene on chromosome 6. [provided by RefSeq, Jul 2013]

**Product images:**



Circular map for RC200304L1



Double digestion of RC200304L1 using SgfI and MluI