

## Product datasheet for **RG204137**

### RAP1A (NM\_001010935) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** RAP1A (NM\_001010935) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** RAP1A  
**Synonyms:** C21KG; G-22K; KREV-1; KREV1; RAP1; SMGP21  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG204137 representing NM\_001010935  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATCGGTGAGTACAAGCTAGTGGTCCTTGGTTCAGGAGGCGTTGGGAAGTCTGCTCTGACAGTTCAGTTTG  
 TTCAGGGAATTTTTGTTGAAAAATGACCCAACGATAGAAGATTCCTACAGAAAGCAAGTTGAAGTCGA  
 TTGCCAACAGTGTATGCTCGAAATCCTGGATACTGCAGGGACAGAGCAATTTACAGCAATGAGGGATTTG  
 TATATGAAGAACGCCAAGTTTTGCACTAGTATATTCTATTACAGCTCAGTCCAGTAAACGACTTAC  
 AGGACCTGAGGGAACAGATTTTACGGGTTAAGGACACGGAAGATGTTCCAATGATTTTGGTTGGCAATAA  
 ATGTGACCTGGAAGATGAGCGAGTAGTTGGCAAAGAGCAGGGCCAGAATTTAGCAAGACAGTGGTGTAA  
 TGTGCCTTTTTAGAACTTCTGCAAAGTCAAAGATCAATGTTAATGAGATATTTTATGACCTGGTCAGAC  
 AGATAAATAGGAAAACACCAGTGGAAAAGAAGCCTAAAAAGAAATCATGTCTGCTGCTC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG204137 representing NM\_001010935  
 Red=Cloning site Green=Tags(s)

MREYKLVVLGSGGVGKSALTVQFVQGI FVEKYDPTIEDSYRKQVEVDCQCML EILD TAGTEQFTAMRDL  
 YMKNGQGFALVYSITAQSTFNDLQDLREQILRVKDTEDVPMILVGNKCDLEDERVVGKEQGQNLARQWCN  
 CAFLESSAKSKINVNEIFYDLVRQINRKPVEKKPKKKSCLLL

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** Sgfl-MluI



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**Cloning Scheme:**


**ACCN:** NM\_001010935

**ORF Size:** 552 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\\_001010935.2](#)

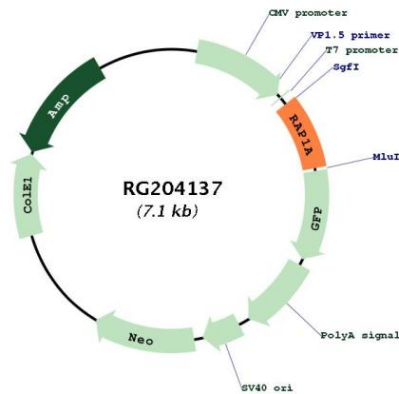
**RefSeq Size:** 1906 bp

**RefSeq ORF:** 555 bp

**Locus ID:** 5906

**UniProt ID:** [P62834](#)

<b>Cytogenetics:</b>	1p13.2
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Chemokine signaling pathway, Focal adhesion, Leukocyte transendothelial migration, Long-term potentiation, MAPK signaling pathway, Neurotrophin signaling pathway, Renal cell carcinoma
<b>Gene Summary:</b>	This gene encodes a member of the Ras family of small GTPases. The encoded protein undergoes a change in conformational state and activity, depending on whether it is bound to GTP or GDP. This protein is activated by several types of guanine nucleotide exchange factors (GEFs), and inactivated by two groups of GTPase-activating proteins (GAPs). The activation status of the encoded protein is therefore affected by the balance of intracellular levels of GEFs and GAPs. The encoded protein regulates signaling pathways that affect cell proliferation and adhesion, and may play a role in tumor malignancy. Pseudogenes of this gene have been defined on chromosomes 14 and 17. Alternative splicing results in multiple transcript variants. [provided by RefSeq, May 2014]

**Product images:**


Circular map for RG204137