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 GCTGCACACTGACCTGCAGAAGGAGAAGCAGGACAAGGTGGTGCTCCAGTCAGAGGTGGCCAGCCTGCGG  
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 TCTGCAGGGAGAAGAAGGAGCTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>RG220237 representing NM\_015073  
 Red=Cloning site Green=Tags(s)

MTTYRAIPSDGVDLAASCGARVGDVLPGPHTGDYAPLGFWAQNGSMSQPLGESPATATATATATTPRSPT  
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 RTLSDLSLCSGRREPSFASPAGLEPGLPSDVLFTSTCAFPSSTLPARRQHHPHPVPGATPAAGSGFP  
 EKKSTISASELSLADGRDRPLRRLDPGLMPLPDTAAGLEWSSLVNAAKAYEVQRAVSLFLNDPALSPDI  
 PPAHSPVHSHLSLERGPPTPTPTMSEEPPLDLTGKVVYQLEVMKQLHTDLQKEKQDKVVLQSEVASLR  
 QNNQRLQEESQAASEQLRKF AEIFCREKKEL

TRTRPLE - GFP Tag - V

**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:



ACCN: NM\_015073

ORF Size: 5343 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\\_015073.1](#), [NP\\_055888.1](#)

**RefSeq Size:** 7984 bp

**RefSeq ORF:** 5346 bp

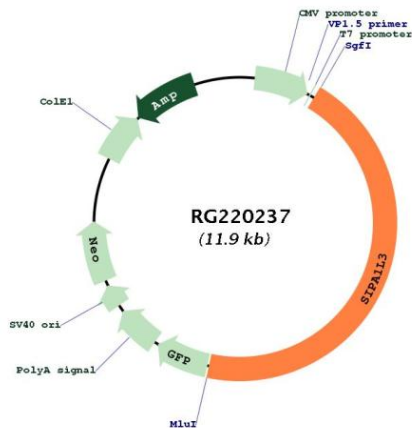
**Locus ID:** 23094

**UniProt ID:** [O60292](#)

**Cytogenetics:** 19q13.13-q13.2

**Gene Summary:** This gene belongs to the signal induced proliferation associated 1 family of genes, which encode GTPase-activating proteins specific for the GTP-binding protein Rap1. Rap1 has been implicated in regulation of cell adhesion, cell polarity, and organization of the cytoskeleton. Like other members of the family, the protein encoded by this gene contains RapGAP and PDZ domains. In addition, this protein contains a C-terminal leucine zipper domain. This gene is proposed to function in epithelial cell morphogenesis and establishment or maintenance of polarity. Consistently, expression of the protein in cell culture showed localization to cell-cell borders in apical regions, and downregulation of the gene in 3D Caco2 cell culture resulted in abnormal cell polarity and morphogenesis. Allelic variants of this gene have been associated with congenital cataracts in humans. [provided by RefSeq, Feb 2016]

### Product images:



Circular map for RG220237