

## Product datasheet for **SC316410**

### **RASGRP2 (NM\_001098670) Human Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	RASGRP2 (NM_001098670) Human Untagged Clone
Tag:	Tag Free
Symbol:	RASGRP2
Synonyms:	CALDAG-GEFI; CDC25L
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



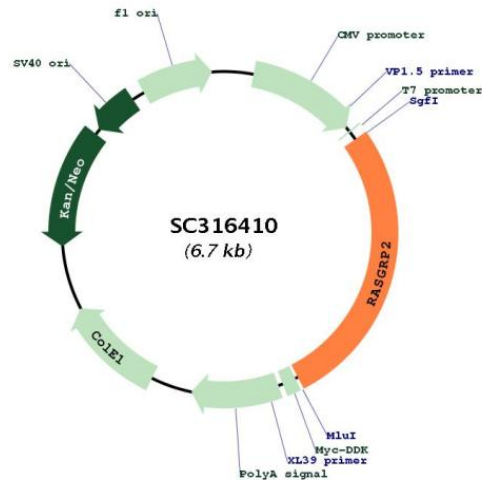
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**Fully Sequenced ORF:** >SC316410 representing NM\_001098670.  
 Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGGATCGCC
ATGGCAGGCACCCTGGACCTGGACAAGGGCTGCACGGTGGAGAGCTGCTCCGCGGTGCATCGAAGCC
TTCGATGACTCCGGGAAGGTGCGGGACCCGCAGCTGGTGGCATGTTCCATCATGATGCACCCTGGTAC
ATCCCCTCCTCTCAGCTGGCGGCCAAGCTGCTCCACATCTACCAACAATCCCGGAAGGACAACCTCAAT
TCCTGCAGGTGAAAACGTGCCACCTGGTCAGGTACTGGATCTCCGCCTCCACAGCGAGTTTGACTTG
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ACGGTGGAGGATGGGGTGTGACATCCACTTGTAA
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTAAACGGCCGGC
  
```

**Restriction Sites:** SgfI-MluI

**Plasmid Map:**


**ACCN:** NM\_001098670

**Insert Size:** 1830 bp

**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).

**OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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\\_001098670.1](#)

**RefSeq Size:** 2244 bp

**RefSeq ORF:** 1830 bp

**Locus ID:** 10235

**UniProt ID:** [Q7LDG7](#)

**Cytogenetics:** 11q13.1

**Protein Pathways:** Chemokine signaling pathway, MAPK signaling pathway

**MW:** 69.2 kDa

**Gene Summary:** The protein encoded by this gene is a brain-enriched nucleotide exchanged factor that contains an N-terminal GEF domain, 2 tandem repeats of EF-hand calcium-binding motifs, and a C-terminal diacylglycerol/phorbol ester-binding domain. This protein can activate small GTPases, including RAS and RAP1/RAS3. The nucleotide exchange activity of this protein can be stimulated by calcium and diacylglycerol. Four alternatively spliced transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq, Jan 2016]

Transcript Variant: This variant (3) differs in the 5' UTR compared to variant 2. Variants 2, 3, and 4 all encode the same protein.