

## Product datasheet for RC228987L4

#### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

# RASGRP 4 (RASGRP4) (NM\_001146202) Human Tagged Lenti ORF Clone

### **Product data:**

**Product Type:** Expression Plasmids

Product Name: RASGRP 4 (RASGRP4) (NM\_001146202) Human Tagged Lenti ORF Clone

Tag: mGFP

Symbol: RASGRP 4

Mammalian Cell Puromycin

Selection:

Vector:

pLenti-C-mGFP-P2A-Puro (PS100093)

E. coli Selection: Chloramphenicol (34 ug/mL)

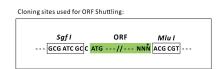
ORF Nucleotide

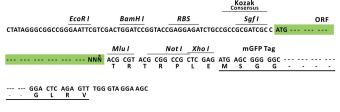
The ORF insert of this clone is exactly the same as(RC228987).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:



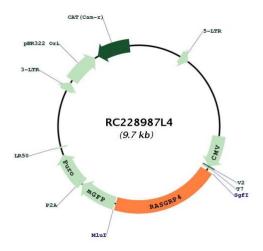


<sup>\*</sup> The last codon before the Stop codon of the ORF.





### Plasmid Map:



**ACCN:** NM\_001146202

ORF Size: 1977 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: <u>NM 001146202.1</u>, <u>NP 001139674.1</u>

RefSeq ORF: 1980 bp





 Locus ID:
 115727

 UniProt ID:
 Q8TDF6

 Cytogenetics:
 19q13.2

**Protein Families:** Druggable Genome

**Protein Pathways:** MAPK signaling pathway

**MW:** 73.4 kDa

**Gene Summary:** The protein encoded by this gene is a member of the Ras guanyl nucleotide-releasing protein

(RasGRP) family of Ras guanine nucleotide exchange factors. It contains a Ras exchange motif, a diacylglycerol-binding domain, and two calcium-binding EF hands. This protein was shown to activate H-Ras in a cation-dependent manner in vitro. Expression of this protein in myeloid cell lines was found to be correlated with elevated level of activated RAS protein, and the RAS activation can be greatly enhanced by phorbol ester treatment, which suggested a role of this protein in diacylglycerol regulated cell signaling pathways. Studies of a mast cell leukemia cell line expressing substantial amounts of abnormal transcripts of this gene indicated that this gene may play an important role in the final stages of mast cell development. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by

RefSeq, Apr 2009]