

Product datasheet for RC222055L4

RAPGEF2 (NM_014247) Human Tagged Lenti ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RAPGEF2 (NM_014247) Human Tagged Lenti ORF Clone
Tag:	mGFP
Symbol:	RAPGEF2
Synonyms:	CNrasGEF; NRAPGEP; nRap GEP; PDZ-GEF1; PDZGEF1; RA-GEF; RA-GEF-1; RAGEF; Rap-GEP
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC222055).
Restriction Sites:	SgfI-MluI
Cloning Scheme:	

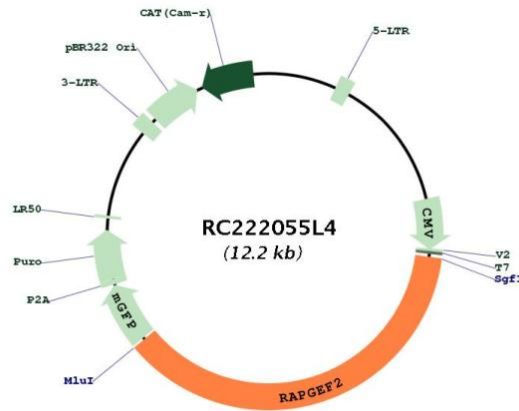
Cloning sites used for ORF Shuttling:



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



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Plasmid Map:


ACCN: NM_014247

ORF Size: 4497 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_014247.1](#), [NP_055062.1](#)

RefSeq Size: 6568 bp

RefSeq ORF: 4500 bp

Locus ID:	9693
UniProt ID:	Q9Y4G8
Cytogenetics:	4q32.1
Domains:	RA, cNMP, RasGEFN, PDZ, RasGEF
Protein Pathways:	MAPK signaling pathway
MW:	167.2 kDa
Gene Summary:	Members of the RAS (see HRAS; MIM 190020) subfamily of GTPases function in signal transduction as GTP/GDP-regulated switches that cycle between inactive GDP- and active GTP-bound states. Guanine nucleotide exchange factors (GEFs), such as RAPGEF2, serve as RAS activators by promoting acquisition of GTP to maintain the active GTP-bound state and are the key link between cell surface receptors and RAS activation (Rebhun et al., 2000 [PubMed 10934204]).[supplied by OMIM, Mar 2008]