

Product datasheet for RC214699L3

OriGene Technologies, Inc.

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RASA1 (NM_022650) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: RASA1 (NM_022650) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: RASA1

Synonyms: CM-AVM; CMAVM; CMAVM1; GAP; p120; p120GAP; p120RASGAP; PKWS; RASA; RASGAP

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

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

ORF Nucleotide The ORF insert of this clone

Sequence:

The ORF insert of this clone is exactly the same as(RC214699).

Restriction Sites: Sgfl-Mlul

Cloning Scheme:



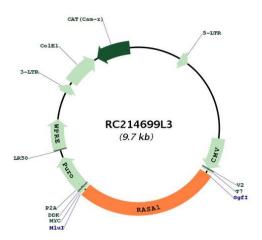


^{*} The last codon before the Stop codon of the ORF.





Plasmid Map:



ACCN: NM_022650 **ORF Size:** 2610 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 022650.2</u>

RefSeq Size: 3796 bp RefSeq ORF: 2613 bp



RASA1 (NM_022650) Human Tagged Lenti ORF Clone - RC214699L3

 Locus ID:
 5921

 UniProt ID:
 P20936

 Cytogenetics:
 5q14.3

Domains: C2, SH2, SH3, PH, RasGAP, VPS9

Protein Families: Druggable Genome

Protein Pathways: Axon guidance, MAPK signaling pathway

MW: 100.4 kDa

Gene Summary: The protein encoded by this gene is located in the cytoplasm and is part of the GAP1 family of

GTPase-activating proteins. The gene product stimulates the GTPase activity of normal RAS p21 but not its oncogenic counterpart. Acting as a suppressor of RAS function, the protein enhances the weak intrinsic GTPase activity of RAS proteins resulting in the inactive GDP-bound form of RAS, thereby allowing control of cellular proliferation and differentiation. Mutations leading to changes in the binding sites of either protein are associated with basal cell carcinomas. Mutations also have been associated with hereditary capillary malformations (CM) with or without arteriovenous malformations (AVM) and Parkes Weber syndrome. Alternative splicing results in two isoforms where the shorter isoform, lacking the N-terminal hydrophobic region but retaining the same activity, appears to be abundantly expressed in

placental but not adult tissues. [provided by RefSeq, May 2012]