

Product datasheet for **RC214699L4V**

RASA1 (NM_022650) Human Tagged ORF Clone Lentiviral Particle

Product data:

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|---------------------------|--|
| Product Type: | Lentiviral Particles |
| Product Name: | RASA1 (NM_022650) Human Tagged ORF Clone Lentiviral Particle |
| Symbol: | RASA1 |
| Synonyms: | CM-AVM; CMAVM; CMAVM1; GAP; p120; p120GAP; p120RASGAP; PKWS; RASA; RASGAP |
| Mammalian Cell Selection: | Puromycin |
| Vector: | pLenti-C-mGFP-P2A-Puro (PS100093) |
| Tag: | mGFP |
| ACCN: | NM_022650 |
| ORF Size: | 2610 bp |
| ORF Nucleotide Sequence: | The ORF insert of this clone is exactly the same as(RC214699). |
| 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. |
| RefSeq: | NM_022650.2 |
| RefSeq Size: | 3796 bp |
| RefSeq ORF: | 2613 bp |
| Locus ID: | 5921 |
| UniProt ID: | P20936 |
| Cytogenetics: | 5q14.3 |
| Domains: | C2, SH2, SH3, PH, RasGAP, VPS9 |
| Protein Families: | Druggable Genome |



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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]