

Product datasheet for RC205473L4V

OriGene Technologies, Inc.

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RASA1 (NM_002890) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: RASA1 (NM_002890) Human Tagged ORF Clone Lentiviral Particle

Symbol: RASA^{*}

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_002890 **ORF Size:** 3141 bp

ORF Nucleotide

- -

Sequence:

The ORF insert of this clone is exactly the same as(RC205473).

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.

RefSeg: NM 002890.1

 RefSeq Size:
 4402 bp

 RefSeq ORF:
 3144 bp

 Locus ID:
 5921

 UniProt ID:
 P20936

 Cytogenetics:
 5q14.3

Domains: C2, SH2, SH3, PH, RasGAP

Protein Families: Druggable Genome





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Protein Pathways: Axon guidance, MAPK signaling pathway

MW: 116.4 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]