

## Product datasheet for RC214699L3

### 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 Selection:	Puromycin
Vector:	pLenti-C-Myc-DDK-P2A-Puro (PS100092)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC214699).
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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Locus ID:	5921
UniProt ID:	<a href="#">P20936</a>
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]