

Product datasheet for TR302108

OriGene Technologies, Inc.

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RASA1 Human shRNA Plasmid Kit (Locus ID 5921)

Product data:

Product Type: shRNA Plasmids

Product Name: RASA1 Human shRNA Plasmid Kit (Locus ID 5921)

Locus ID: 592°

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

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection: Format:

Retroviral plasmids

Components: RASA1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

5921). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: NM 002890, NM 022650, NM 002890.1, NM 002890.2, NM 022650.1, BC033015, BC033015.2,

BC020761, BC054891, BC070063, BC107870, BC131816, NM 002890.3, NM 022650.3

UniProt ID: P20936

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

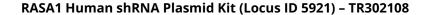
GTPase-activating proteins. The gene product stimulates the GTPase activity of normal RAS p21 but not its oncogenic counterpart. Acting as a suppressor of RAS function, the protein enhances the weak intrinsic GTPase activity of RAS proteins resulting in the inactive GDP-bound form of RAS, thereby allowing 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]

shRNA Design: These shRNA constructs were designed against multiple splice variants at this gene locus. To

be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.







Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).