

Product datasheet for TR302103

OriGene Technologies, Inc.

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RASGRF1 Human shRNA Plasmid Kit (Locus ID 5923)

Product data:

Product Type: shRNA Plasmids

Product Name: RASGRF1 Human shRNA Plasmid Kit (Locus ID 5923)

Locus ID: 5923

Synonyms: CDC25; CDC25L; GNRP; GRF1; GRF55; H-GRF55; PP13187; ras-GRF1

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: RASGRF1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

5923). 5µg purified plasmid DNA per construct

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

RefSeq: BC040275, NM 001145648, NM 002891, NM 153815, NM 153815.2, NM 002891.1,

NM 002891.2, NM 002891.3, NM 002891.4, NM 001145648.1, BC040275.1, NM 001145648.3,

NM 002891.6

UniProt ID: Q13972

Summary: The protein encoded by this gene is a guanine nucleotide exchange factor (GEF) similar to the

Saccharomyces cerevisiae CDC25 gene product. Functional analysis has demonstrated that this protein stimulates the dissociation of GDP from RAS protein. The studies of the similar gene in mouse suggested that the Ras-GEF activity of this protein in brain can be activated by Ca2+ influx, muscarinic receptors, and G protein beta-gamma subunit. Mouse studies also indicated that the Ras-GEF signaling pathway mediated by this protein may be important for long-term memory. Alternatively spliced transcript variants encoding distinct isoforms have

been reported. [provided by RefSeq, Mar 2009]

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 custom shRNA service.







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).