

## Product datasheet for **RC227574L4V**

### **RASGRF1 (NM\_001145648) Human Tagged ORF Clone Lentiviral Particle**

#### **Product data:**

Product Type:	Lentiviral Particles
Product Name:	RASGRF1 (NM_001145648) Human Tagged ORF Clone Lentiviral Particle
Symbol:	RASGRF1
Synonyms:	CDC25; CDC25L; GNRP; GRF1; GRF55; H-GRF55; PP13187; ras-GRF1
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_001145648
ORF Size:	3771 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC227574).
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. <a href="#">More info</a>
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:	<a href="#">NM_001145648.1</a>
RefSeq ORF:	3774 bp
Locus ID:	5923
Cytogenetics:	15q25.1
Protein Families:	Druggable Genome
Protein Pathways:	Focal adhesion, MAPK signaling pathway
MW:	143 kDa



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**Gene 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 Ca<sup>2+</sup> 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]