

Product datasheet for **RC224594L4V**

RGR (NM_001012722) Human Tagged ORF Clone Lentiviral Particle

Product data:

| | |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Type: | Lentiviral Particles |
| Product Name: | RGR (NM_001012722) Human Tagged ORF Clone Lentiviral Particle |
| Symbol: | RGR |
| Synonyms: | RP44 |
| Mammalian Cell Selection: | Puromycin |
| Vector: | pLenti-C-mGFP-P2A-Puro (PS100093) |
| Tag: | mGFP |
| ACCN: | NM_001012722 |
| ORF Size: | 759 bp |
| ORF Nucleotide Sequence: | The ORF insert of this clone is exactly the same as(RC224594). |
| 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. |
| RefSeq: | NM_001012722.1 , NP_001012740.1 |
| RefSeq Size: | 1349 bp |
| RefSeq ORF: | 762 bp |
| Locus ID: | 5995 |
| UniProt ID: | P47804 |
| Cytogenetics: | 10q23.1 |
| Protein Families: | Druggable Genome, GPCR, Transmembrane |
| MW: | 27.5 kDa |



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Gene Summary:

This gene encodes a putative retinal G-protein coupled receptor. The gene is a member of the opsin subfamily of the 7 transmembrane, G-protein coupled receptor 1 family. Like other opsins which bind retinaldehyde, it contains a conserved lysine residue in the seventh transmembrane domain. The protein acts as a photoisomerase to catalyze the conversion of all-trans-retinal to 11-cis-retinal. The reverse isomerization occurs with rhodopsin in retinal photoreceptor cells. The protein is exclusively expressed in tissue adjacent to retinal photoreceptor cells, the retinal pigment epithelium and Mueller cells. This gene may be associated with autosomal recessive and autosomal dominant retinitis pigmentosa (arRP and adRP, respectively). Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jul 2008]