

## **Product datasheet for RC203778L3**

## RGR (NM\_002921) Human Tagged Lenti ORF Clone

## **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** RGR (NM\_002921) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: RGR

Synonyms: RP44

Mammalian Cell Puromycin

Selection:

**Vector:** pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC203778).

Sequence:

Restriction Sites: Sgfl-Mlul

**Cloning Scheme:** 





 $<sup>\</sup>ensuremath{^*}$  The last codon before the Stop codon of the ORF.

ACCN: NM\_002921

ORF Size: 885 bp



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## RGR (NM\_002921) Human Tagged Lenti ORF Clone - RC203778L3

**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.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:** 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

**RefSeq:** <u>NM 002921.3</u>

RefSeq Size: 1475 bp

RefSeq ORF: 888 bp

**Locus ID:** 5995

UniProt ID: P47804

Cytogenetics: 10q23.1

**Domains:** 7tm 1

**Protein Families:** Druggable Genome, GPCR, Transmembrane

MW: 32.4 kDa

**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]