

### Product datasheet for RC207915L4

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## GCLC (NM\_001498) Human Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** GCLC (NM\_001498) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: GCLC

Synonyms: GCL; GCS; GLCL; GLCLC

Mammalian Cell Puromycin

Selection:

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

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

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC207915).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_001498

ORF Size: 1911 bp





### GCLC (NM\_001498) Human Tagged Lenti ORF Clone - RC207915L4

**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 001498.2</u>

 RefSeq Size:
 3823 bp

 RefSeq ORF:
 1914 bp

 Locus ID:
 2729

 UniProt ID:
 P48506

Cytogenetics: 6p12.1

**Domains:** GCS

**Protein Families:** Druggable Genome

**Protein Pathways:** Glutathione metabolism, Metabolic pathways

**MW:** 72.8 kDa

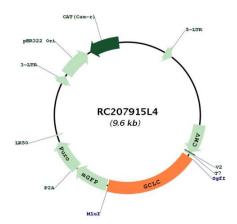
**Gene Summary:** Glutamate-cysteine ligase, also known as gamma-glutamylcysteine synthetase is the first rate-

limiting enzyme of glutathione synthesis. The enzyme consists of two subunits, a heavy catalytic subunit and a light regulatory subunit. This locus encodes the catalytic subunit, while the regulatory subunit is derived from a different gene located on chromosome 1p22-p21. Mutations at this locus have been associated with hemolytic anemia due to deficiency of gamma-glutamylcysteine synthetase and susceptibility to myocardial infarction.[provided by

RefSeq, Oct 2010]



# **Product images:**



Circular map for RC207915L4