

## Product datasheet for MR225358L4

### Grn (NM\_008175) Mouse Tagged Lenti ORF Clone

#### Product data:

|                           |  |
|---------------------------|--|
| Product Type:             | Expression Plasmids  |
| Product Name:             | Grn (NM_008175) Mouse Tagged Lenti ORF Clone                   |
| Tag:                      | mGFP   |
| Symbol:                   | Grn  |
| Synonyms:                 | epithelin; Pgrn  |
| Mammalian Cell Selection: | Puromycin  |
| Vector:                   | pLenti-C-mGFP-P2A-Puro (PS100093)                              |
| E. coli Selection:        | Chloramphenicol (34 ug/mL)                                     |
| ORF Nucleotide Sequence:  | The ORF insert of this clone is exactly the same as(MR225358). |
| Restriction Sites:        | SgfI-MluI  |
| Cloning Scheme:           |  |

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF.

|           |           |
|-----------|-----------|
| ACCN:     | NM_008175 |
| ORF Size: | 1806 bp   |



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**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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:** [NM\\_008175.4](#), [NP\\_032201.2](#)

**RefSeq Size:** 2348 bp

**RefSeq ORF:** 1809 bp

**Locus ID:** 14824

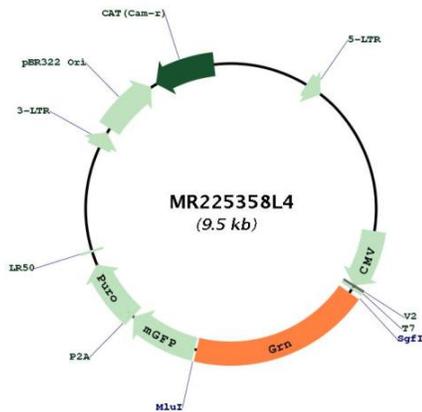
**UniProt ID:** [P28798](#)

**Cytogenetics:** 11 66.29 cM

**Gene Summary:**

Secreted proteins that act as key regulator of lysosomal function and as a growth factor involved in inflammation, wound healing and cell proliferation (PubMed:28073925, PubMed:8496151, PubMed:28541286, PubMed:28453791, PubMed:20026663, PubMed:23041626, PubMed:27789271, PubMed:12524533). Functions as regulator of proteins trafficking to lysosome and activity of lysosomal enzymes (PubMed:28453791, PubMed:28541286, PubMed:27789271). Facilitates also the acidification of lysosomes, causing degradation of mature CTSD by CTSB (PubMed:28073925). In addition, functions as wound-related growth factor that acts directly on dermal fibroblasts and endothelial cells to promote division, migration and the formation of capillary-like tubule structure (PubMed:12524533). Also promotes epithelial cell proliferation by blocking TNF-mediated neutrophil activation preventing release of oxidants and proteases (PubMed:8496151). Moreover, modulates inflammation in neuron by preserving neuron survival, axonal outgrowth and neuronal integrity (PubMed:23041626, PubMed:20026663).[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR225358L4