

## Product datasheet for MR223303L4

### Casr (NM\_013803) Mouse Tagged Lenti ORF Clone

#### Product data:

|                           |  |
|---------------------------|--|
| Product Type:             | Expression Plasmids  |
| Product Name:             | Casr (NM_013803) Mouse Tagged Lenti ORF Clone                  |
| Tag:                      | mGFP   |
| Symbol:                   | Casr   |
| Synonyms:                 | CaR; Gprc2a  |
| 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(MR223303). |
| Restriction Sites:        | SgfI-MluI  |
| Cloning Scheme:           |  |

Cloning sites used for ORF Shuttling:

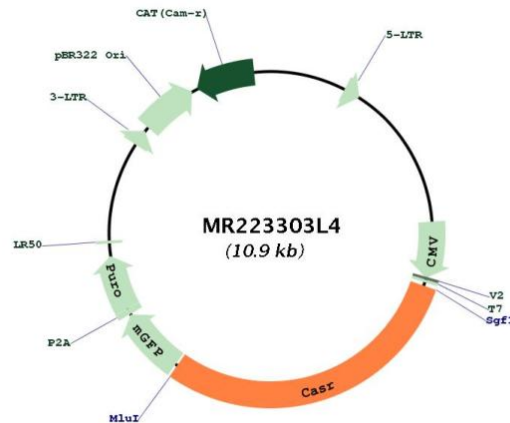


\* The last codon before the Stop codon of the ORF.



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Plasmid Map:



ACCN: NM\_013803

ORF Size: 3237 bp

**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\\_013803.2](#)

**RefSeq Size:** 4549 bp

**RefSeq ORF:** 3240 bp

**Locus ID:** 12374

**UniProt ID:** [Q9QY96](#)

**Cytogenetics:** 16 25.57 cM

**Gene Summary:** G-protein-coupled receptor that senses changes in the extracellular concentration of calcium ions and plays a key role in maintaining calcium homeostasis (By similarity). Senses fluctuations in the circulating calcium concentration and modulates the production of parathyroid hormone (PTH) in parathyroid glands (PubMed:7493018). The activity of this receptor is mediated by a G-protein that activates a phosphatidylinositol-calcium second messenger system (By similarity). The G-protein-coupled receptor activity is activated by a co-agonist mechanism: aromatic amino acids, such as Trp or Phe, act concertedly with divalent cations, such as calcium or magnesium, to achieve full receptor activation (By similarity). [UniProtKB/Swiss-Prot Function]