

## Product datasheet for RC208200L4

### Calpain 7 (CAPN7) (NM\_014296) Human Tagged Lenti ORF Clone

#### Product data:

|                           |                                                                |
|---------------------------|----------------------------------------------------------------|
| Product Type:             | Expression Plasmids                                            |
| Product Name:             | Calpain 7 (CAPN7) (NM_014296) Human Tagged Lenti ORF Clone     |
| Tag:                      | mGFP                                                           |
| Symbol:                   | Calpain 7                                                      |
| Synonyms:                 | CALPAIN7; PALBH                                                |
| 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(RC208200). |
| Restriction Sites:        | SgfI-MluI                                                      |
| Cloning Scheme:           |                                                                |

Cloning sites used for ORF Shuttling:



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

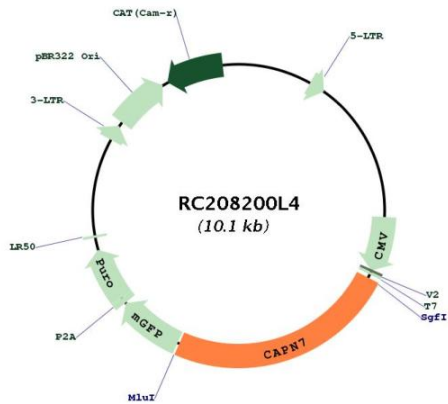
|           |           |
|-----------|-----------|
| ACCN:     | NM_014296 |
| ORF Size: | 2439 bp   |



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|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>OTI Disclaimer:</b>        | 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. <a href="#">More info</a>                                                                                                                                                                                                                                                                                  |
| <b>OTI Annotation:</b>        | This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Components:</b>            | 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).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Reconstitution Method:</b> | <ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>                                                                                                                                                                                                                   |
| <b>RefSeq:</b>                | <a href="#">NM_014296.2</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>RefSeq Size:</b>           | 4385 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>RefSeq ORF:</b>            | 2442 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Locus ID:</b>              | 23473                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>UniProt ID:</b>            | <a href="#">Q9Y6W3</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Cytogenetics:</b>          | 3p25.1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Domains:</b>               | Calpain_III, MIT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Protein Families:</b>      | Druggable Genome, Protease                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>MW:</b>                    | 92.7 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Gene Summary:</b>          | Calpains are ubiquitous, well-conserved family of calcium-dependent, cysteine proteases. The calpain proteins are heterodimers consisting of an invariant small subunit and variable large subunits. The large subunit possesses a cysteine protease domain, and both subunits possess calcium-binding domains. Calpains have been implicated in neurodegenerative processes, as their activation can be triggered by calcium influx and oxidative stress. The function of the protein encoded by this gene is not known. An orthologue has been found in mouse but it seems to diverge from other family members. The mouse orthologue is thought to be calcium independent with protease activity. [provided by RefSeq, Jul 2008] |

Product images:



Circular map for RC208200L4