

## Product datasheet for RC219169L2

### CHIT1 (NM\_003465) Human Tagged Lenti ORF Clone

#### Product data:

|                           |  |
|---------------------------|--|
| Product Type:             | Expression Plasmids  |
| Product Name:             | CHIT1 (NM_003465) Human Tagged Lenti ORF Clone                 |
| Tag:                      | mGFP   |
| Symbol:                   | CHIT1  |
| Synonyms:                 | CHI3; CHIT; CHITD  |
| Mammalian Cell Selection: | None   |
| Vector:                   | pLenti-C-mGFP (PS100071)                                       |
| E. coli Selection:        | Chloramphenicol (34 ug/mL)                                     |
| ORF Nucleotide Sequence:  | The ORF insert of this clone is exactly the same as(RC219169). |
| Restriction Sites:        | SgfI-MluI  |
| Cloning Scheme:           |  |

Cloning sites used for ORF Shuttling:



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

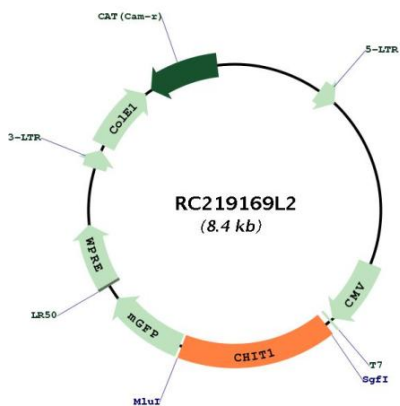
|           |           |
|-----------|-----------|
| ACCN:     | NM_003465 |
| ORF Size: | 1398 bp   |



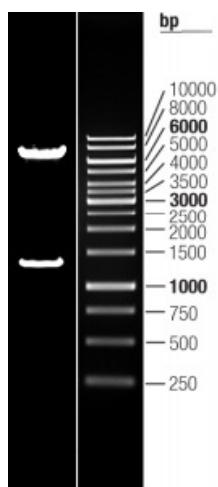
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|                               |   |
|-------------------------------|---|
| <b>OTI Disclaimer:</b>        | The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences 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_003465.1</a>   |
| <b>RefSeq Size:</b>           | 1633 bp   |
| <b>RefSeq ORF:</b>            | 1401 bp   |
| <b>Locus ID:</b>              | 1118  |
| <b>UniProt ID:</b>            | <a href="#">Q13231</a>  |
| <b>Cytogenetics:</b>          | 1q32.1  |
| <b>Domains:</b>               | Glyco_18, CBM_14  |
| <b>Protein Families:</b>      | Secreted Protein, Transmembrane   |
| <b>Protein Pathways:</b>      | Amino sugar and nucleotide sugar metabolism   |
| <b>MW:</b>                    | 51.5 kDa  |
| <b>Gene Summary:</b>          | Chitotriosidase is secreted by activated human macrophages and is markedly elevated in plasma of Gaucher disease patients. The expression of chitotriosidase occurs only at a late stage of differentiation of monocytes to activated macrophages in culture. Human macrophages can synthesize a functional chitotriosidase, a highly conserved enzyme with a strongly regulated expression. This enzyme may play a role in the degradation of chitin-containing pathogens. Several alternatively spliced transcript variants have been described for this gene. [provided by RefSeq, Jan 2012] |

Product images:



Circular map for RC219169L2



Double digestion of RC219169L2 using SgfI and MluI