

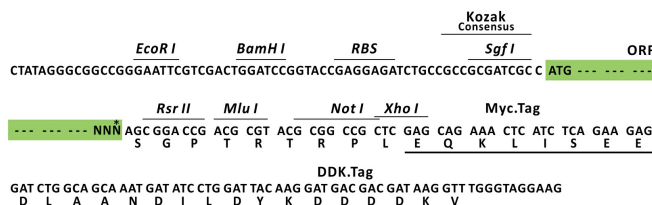
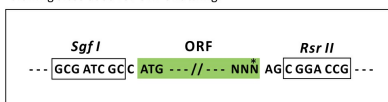
## Product datasheet for MR219032L3

### MyoIg (NM\_178440) Mouse Tagged Lenti ORF Clone

#### Product data:

|                           |                                                                |
|---------------------------|----------------------------------------------------------------|
| Product Type:             | Expression Plasmids                                            |
| Tag:                      | Myc-DDK                                                        |
| Symbol:                   | MyoIg                                                          |
| Synonyms:                 | E430002D17Rik                                                  |
| Mammalian Cell Selection: | Puromycin                                                      |
| Vector:                   | pLenti-C-Myc-DDK-P2A-Puro (PS100092)                           |
| E. coli Selection:        | Chloramphenicol (34 ug/mL)                                     |
| ORF Nucleotide Sequence:  | The ORF insert of this clone is exactly the same as(MR219032). |
| Restriction Sites:        | SgfI-RsrII                                                     |
| Cloning Scheme:           |                                                                |

Cloning sites used for ORF Shuttling:



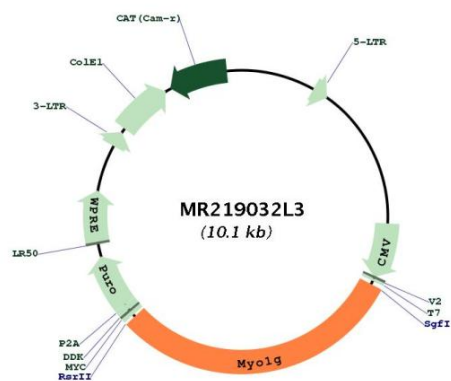
\* The last codon before the Stop codon of the ORF.

|           |           |
|-----------|-----------|
| ACCN:     | NM_178440 |
| ORF Size: | 3072 bp   |



|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <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>Note:</b>                  | Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>RefSeq:</b>                | <a href="#">NM_178440.4</a> , <a href="#">NP_848534.2</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>RefSeq Size:</b>           | 3307 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>RefSeq ORF:</b>            | 3075 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Locus ID:</b>              | 246177                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>UniProt ID:</b>            | <a href="#">Q5SUA5</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Cytogenetics:</b>          | 11 A1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Gene Summary:</b>          | <p>Unconventional myosin required during immune response for detection of rare antigen-presenting cells by regulating T-cell migration (PubMed:25083865). Unconventional myosins are actin-based motor molecules with ATPase activity and serve in intracellular movements. Acts as a regulator of T-cell migration by generating membrane tension, enforcing cell-intrinsic meandering search, thereby enhancing detection of rare antigens during lymph-node surveillance, enabling pathogen eradication (PubMed:25083865). Also required in B-cells, where it regulates different membrane/cytoskeleton-dependent processes (PubMed:24310084). Involved in Fc-gamma receptor (Fc-gamma-R) phagocytosis (PubMed:23038771).[UniProtKB/Swiss-Prot Function]</p> |

## Product images:



Circular map for MR219032L3