

## Product datasheet for MR227225L3

### Tnfsf11 (NM\_011613) Mouse Tagged Lenti ORF Clone

#### Product data:

|                           |  |
|---------------------------|--|
| Product Type:             | Expression Plasmids  |
| Product Name:             | Tnfsf11 (NM_011613) Mouse Tagged Lenti ORF Clone               |
| Tag:                      | Myc-DDK  |
| Symbol:                   | Tnfsf11  |
| Synonyms:                 | Ly109l; ODF; OPGL; RANKL; Trance                               |
| 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(MR227225). |
| Restriction Sites:        | SgfI-MluI  |
| Cloning Scheme:           |  |

Cloning sites used for ORF Shuttling:



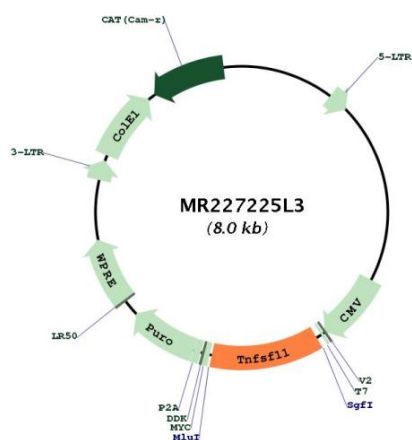
\* The last codon before the Stop codon of the ORF.

|           |           |
|-----------|-----------|
| ACCN:     | NM_011613 |
| ORF Size: | 948 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_011613.2</a> , <a href="#">NP_035743.1</a>  |
| <b>RefSeq Size:</b>           | 2243 bp  |
| <b>RefSeq ORF:</b>            | 951 bp   |
| <b>Locus ID:</b>              | 21943  |
| <b>UniProt ID:</b>            | <a href="#">O35235</a>   |
| <b>Cytogenetics:</b>          | 14 41.26 cM  |
| <b>Gene Summary:</b>          | Cytokine that binds to TNFRSF11B/OPG and to TNFRSF11A/RANK. Osteoclast differentiation and activation factor. Augments the ability of dendritic cells to stimulate naive T-cell proliferation. May be an important regulator of interactions between T-cells and dendritic cells and may play a role in the regulation of the T-cell-dependent immune response. May also play an important role in enhanced bone-resorption in humoral hypercalcemia of malignancy (By similarity). Induces osteoclastogenesis by activating multiple signaling pathways in osteoclast precursor cells, chief among which is induction of long lasting oscillations in the intracellular concentration of Ca (2+) resulting in the activation of NFATC1, which translocates to the nucleus and induces osteoclast-specific gene transcription to allow differentiation of osteoclasts (PubMed:24039232). During osteoclast differentiation, in a TMEM64 and ATP2A2-dependent manner induces activation of CREB1 and mitochondrial ROS generation necessary for proper osteoclast generation (PubMed:23395171, PubMed:26644563).[UniProtKB/Swiss-Prot Function] |

## Product images:



Circular map for MR227225L3