

Product datasheet for **MG227225**

Tnfsf11 (NM_011613) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tnfsf11 (NM_011613) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Tnfsf11
Synonyms:	Ly109l; ODF; OPGL; RANKL; Trance
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG227225 representing NM_011613 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCGCCGGCCAGCCGAGACTACGGCAAGTACCTGCGCAGCTCGGAGGAGATGGGCAGCGGCCCGGGCG
TCCCACACGAGGGTCCGCTGCACCCCGCGCCTTCTGCACCGGCTCCGGCGCCGCCACCCGCGCCTCCCG
CTCCATGTTCTGGCCCTCCTGGGGCTGGGACTGGGCCAGGTGGTCTGCAGCATCGCTCTGTTCTGTAC
TTTCGAGCGCAGATGGATCCTAACAGAATATCAGAAGACAGCACTCACTGCTTTTATAGAATCCTGAGAC
TCCATGAAAACGCAGTTTGCAGGACTCGACTCTGGAGAGTGAAGACACACTACCTGACTCCTGCAGGAG
GATGAAAACAAGCCTTTCAGGGGGCCGTGCAAGAAGAACTGCAACACATTGTGGGGCCACAGCGCTTCTCA
GGAGCTCCAGCTATGATGGAAGGCTCATGGTTGGATGTGGCCAGCGAGGCAAGCCTGAGGCCAGCCAT
TTGCACACCTCACCATCAATGCTGCCAGCATCCCATCGGGTTCATATAAAGTCACTCTGTCTCTTGGTA
CCACGATCGAGGCTGGGCAAGATCTCTAACATGACGTTAAGCAACGGAAAACTAAGGGTTAACCAAGAT
GGCTTCTATTACCTGTACGCCAACATTTGCTTTTCGGCATCATGAAACATCGGGAAGCGTACCTACAGACT
ATCTTCAGCTGATGGTGTATGTCGTTAAAACCAGCATCAAATCCCAAGTTCTCATAACCTGATGAAAGG
AGGGAGCACGAAAACTGGTCGGCAATTCTGAATTCACCTTTTATTCCATAAATGTTGGGGATTTTTTC
AAGCTCCGAGCTGGTGAAGAAATTAGCATTCAAGTGTCCAACCCCTCCCTGCTGGATCCGGATCAAGATG
CGACGTACTTTGGGGCTTCAAAGTTCAAGGACATAGAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG227225 representing NM_011613
 Red=Cloning site Green=Tags(s)

MRRASRDYGKYLRSSEEMGSGPGVPHEGPLHPAPSAPAPAPPPAASRSMFLALLGLGLGQVVCSIALFLY
 FRAQMDPNRISEDSTHCFYRILRLHENAGLQDSTLESEDTLPDSCRRMKQAFQGAVQKELQHVGPQRFS
 GAPAMMEGSLDVAQRGKPEAQPF AHL T INAASIPSGSHKVTLSWYHDRGWAKISNMTLSNGKLRVNQD
 GFYYLYANICFRHHETSGSVPTDYLQLMVYVVKTSIKIPSSHNLMKGGSTKNWSGNSEHFHYSINVGGFF
 KLRAGEEISIQVSNPSSLDDPDQDATYFGAFKVQDID

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_011613

ORF Size: 1001 bp

OTI Disclaimer: 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_011613.2](#), [NP_035743.1](#)

RefSeq Size: 2243 bp

RefSeq ORF: 951 bp

Locus ID: 21943

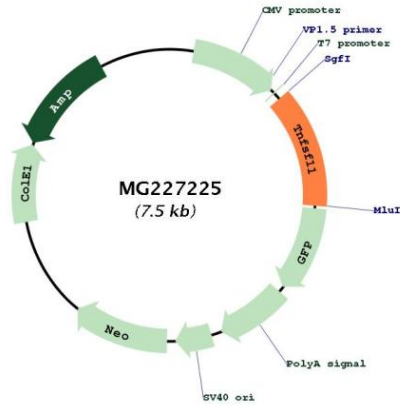
UniProt ID: [O35235](#)

Cytogenetics: 14 41.26 cM

MW: 34.9 kDa

Gene Summary: 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 MG227225