

## Product datasheet for **SC305532**

### **RANKL (TNFSF11) (NM\_033012) Human Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	RANKL (TNFSF11) (NM_033012) Human Untagged Clone
Tag:	Tag Free
Symbol:	RANKL
Synonyms:	CD254; hRANKL2; ODF; OPGL; OPTB2; RANKL; sOdf; TNLG6B; TRANCE
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene sequence for NM_033012 edited CGCCTGGCCTATTGAAGGTTTTTAATCTTCAGAGTTTCGACTTTATCAACAACACTTAGA AGCCACCAAAGAATTGCAGATGGATCCTAATAGAATATCAGAAGATGGCACTCACTGCAT TTATAGAATTTTGAGACTCCATGAAAATGCAGATTTTCAAGACAACTCTGGAGAGTCA AGATACAAAATTAATACCTGATTCATGTAGGAGAATTAACAGGCCTTTCAAGGAGCTGT GCAAAAGGAATTACAACATATCGTTGGATCACAGCACATCAGAGCAGAGAAAGCGATGGT GGATGGCTCATGGTTAGATCTGGCCAAGAGGAGCAAGCTTGAAGCTCAGCCTTTTGCTCA TCTCACTATTAATGCCACCGACATCCCATCTGGTCCCATAAAGTGAGTCTGTCCCTTG GTACCATGATCGGGGTTGGCCAAGATCTCCAACATGACTTTTAGCAATGGAAAATAAT AGTTAATCAGGATGGCTTTTATTACCTGTATGCCAACATTTGCTTTTCGACATCATGAAAC TTCAGGAGACCTAGCTACAGAGTATCTTCAACTAATGGGTACGTCACTAAAACCAGCAT CAAAATCCAAGTTCTCATACCCTGATGAAAGGAGGAAGCACAAGTATTGGTCAGGGAA TTCTGAATTCATTTTATTCCATAAACGTTGGTGGATTTTTTAAGTTACGGTCTGGAGA GGAAATCAGCATCGAGGTCTCCAACCCCTCTTACTGGATCCGGATCAGGATGCAACATA CTTTGGGGCTTTTAAAGTTCGAGATATAGATTGAGCCCCAGTTTTTGGAGT



[View online »](#)

<b>5' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 5' read for NM_033012 unedited            CAGTTCACATTTGTATACGACTCATATAGGGCGGCCGCGATTCAAATCTGGTACCGAGCT            CCGATCCACTAGTAACGGCCGCCAGTGTGCTGGAATTCGCCCTTCGCCTGGCCTATTGAA            GGTTTTAAATCTTCAGAGTTTCGACTTTATCAACAACACTTAGAAGCCACCAAAGAATTG            CAGATGGATCCTAATAGAATATCAGAAGATGGCACTCACTGCATTTATAGAATTTTGAGA            CTCCATGAAAATGCAGATTTTCAAGACACAACCTGGAGAGTCAAGATACAAAATTAATA            CCTGATTCATGTAGGAGAATTAACACAGGCCTTTCAAGGAGCTGTGCAAAAGGAATTACAA            CATATCGTTGGATCACAGCACATCAGAGCAGAGAAAGCGATGGTGGATGGCTCATGGTTA            GATCTGGCCAAGAGGAGCAAGCTTGAAGCTCAGCCTTTTGCTCATCTCACTATTAATGCC            ACCGACATCCCATCTGGTCCCATAAAAGTGAAGTGTGCTCCTTGGTACCATGATCGGGGT            TGGGCCAAGATCTCCAACATGACTTTTAGCAATGGANAACATAAGTTAATCAGGATGGC            TTTTATTACCTGTATGCCAACATTTGCTTTGACATCATGAACTTCAGGAGACCTAGCT            ACAGAGTATCTCAACTAATGGTGTACGCTACTAANACCAGCATCAAAATCCCAGTTCTC            ATACCCTGATGAAAGGAGAAGCACCAAGTATTGGTCAGGGAATTCTGAATCCATTTTTA            TTCCATAACGTTGGTGGATTTTTAAGTTACGGTCTGGAGAGGAATCAGCATCGAGGTCT            CCAACCCCTCCTTACTGGATNCGGATCANNATGCACATACTTTGGNGCNTTTAAAGTN            CGAGATATAGATG</p>
<b>3' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 3' read for NM_033012 unedited            GCATTGGNATGGCACTTCCAGGNCCAGNAAAGCACTGGGGNAGGGTCACAGGGATGCCAC            CCGGGATCTGTTCAAGAAACAGCTATGACCGCGGCCGCAATCTAGATGCATGCTCGAGCG            GCCGCCAGTGTGATGGATATCTGCAGAATTCGCCCTTACTCCAAAACCTGGGGCTCAATC            TATATCTCGAACTTTAAAAGCCCAAAGTATGTTGCATCTGATCCGGATCCAGTAAGGA            GGGGTTGGAGACCTCGATGCTGATTTCCCTCCTCAGACCGTAACTTAAAAATCCACCAAC            GTTTATGGAATAAAAATGGAATTCAGAATTCCTGACCAATACTTGGTGTCTCCTCCTTT            CATCAGGGTATGAGAACTTGGGATTTTGTGCTGGTTTTAGTGACGTACACCATTAGTTG            AAGATACTCTGTAGTCTCCTGAAGTTTCATGATGTCGAAAGCAAAATGTTGGCATA            CAGGTAATAAAAAGCCATCCTGATTAACATTTAGTTTTCCATTGCTAANAGTCATGTTGGA            GATCTTGGCCCAACCCCGATCATGGTACCAAGAGGACAGACTCACTTTATGGGAACCAGA            TGGGATGTCGGTGGCATTAAATAGTGAGATGAGCAAAAAGCTGAGCTTTTCACTTGTCTCT            CTTGGCCAGATCTAACCATGAGCCATCCACCATCGCTTTTCTGCTCTGATGTGCTGTGA            TCCCACGATATGTTGTATTCCCTTTTGCACAGCTCCTTGAAGGCCTGTTAANTCTCCTA            CATGAATCAGTATAATTTTGGATACTGACTCTCAAAGTTGTGGTCTGGAATCTGCATT            TTCATGGAGTCTCAAATCTATAATGCAGTGAGTGCCATCTTCTGAAATCTATTAAGAT            CCAT</p>
<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	NM_033012
<b>Insert Size:</b>	800 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>OTI Annotation:</b>	The open reading frame of this TrueClone was fully sequenced and found to be a perfect match to the protein associated to this reference.
<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).

**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\\_033012.2](#), [NP\\_143026.1](#)

**RefSeq Size:** 1931 bp

**RefSeq ORF:** 735 bp

**Locus ID:** 8600

**UniProt ID:** [O14788](#)

**Cytogenetics:** 13q14.11

**Protein Families:** Druggable Genome, Transmembrane

**Protein Pathways:** Cytokine-cytokine receptor interaction

**Gene Summary:** This gene encodes a member of the tumor necrosis factor (TNF) cytokine family which is a ligand for osteoprotegerin and functions as a key factor for osteoclast differentiation and activation. This protein was shown to be a dendritic cell survival factor and is involved in the regulation of T cell-dependent immune response. T cell activation was reported to induce expression of this gene and lead to an increase of osteoclastogenesis and bone loss. This protein was shown to activate antiapoptotic kinase AKT/PKB through a signaling complex involving SRC kinase and tumor necrosis factor receptor-associated factor (TRAF) 6, which indicated this protein may have a role in the regulation of cell apoptosis. Targeted disruption of the related gene in mice led to severe osteopetrosis and a lack of osteoclasts. The deficient mice exhibited defects in early differentiation of T and B lymphocytes, and failed to form lobulo-alveolar mammary structures during pregnancy. Two alternatively spliced transcript variants have been found. [provided by RefSeq, Jul 2008]

Transcript Variant: This variant (2) differs in the 5' UTR and coding region, compared to variant 1. These differences cause translation initiation at a downstream AUG and an isoform (2) with a shorter N-terminus compared to isoform 1.