



Recombinant Human RANKL, soluble

20150227BB



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	100-276S
Size:	2 µg
Lot. No.:	According to product label

Scientific Background

Gene-ID (NCBI):	8600
Synonyms:	TNFSF11; ODF; OPGL; sOdf; CD254; OPTB2; RANKL; TRANCE; hRANKL2

RANKL and RANK are members of the TNF superfamily of ligands and receptors that play an important role in the regulation of specific immunity and bone turnover. RANK (receptor) was originally identified as a dendritic-cell-membrane protein, which by interacting with RANKL augments the ability of dendritic cells to stimulate naïve T-cell proliferation in a mixed lymphocyte reaction, to promote the survival of RANK + T cells, and to regulate T-cell-dependent immune response. RANKL, which is expressed in a variety of cells including osteoblasts, fibroblasts, activated T-cells and bone marrow stromal cells, is also capable of interacting with a decoy receptor called OPG. Binding of soluble OPG to sRANKL inhibits osteoclastogenesis by interrupting the signaling between stromal cells and osteoclastic progenitor cells, thereby leading to excess accumulation of bone and cartilage. Recombinant human sRANKL is a 20.0 kDa polypeptide comprising the TNF homologous region of RANKL (176 amino acid residues).

Sequence

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MEKAMVDGSW LDLAKRSKLE AQPFAHLTIN ATDIPSGSHK  
VSLSSWYHDR GWAKISNMTF SNGKLIQND GFYYLYANIC  
FRHHETSGDL ATEYLQLMVY VTKTSIKIPS SHTLMKGGST  
KYWSGNSEFH FYSINVGFF KLRSGEEISI EVSNPSLDDP  
DQDATYFGAF KVRDID
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Database References

Protein RefSeq:	NP_003692.1
Uniprot ID:	O14788
mRNA RefSeq:	NM_003701.3

Product Specifications

Expressed in	E. coli
Purity	> 98% by SDS-PAGE & HPLC analyses
Endotoxin level	< 0.1 ng /µg of protein (<1EU/µg).
Formulation	lyophilized
Length (aa):	176
MW:	20 kDa

Biological Activity: Determined by its ability to induce NFkappaB in RAW264.7 cells in the absence of any cross-linking. The expected ED50 for this effect is 10.0-25.0 ng/ml.



AVOID REPEATED FREEZE AND THAW CYCLES!