

PA202

Recombinant Murine CD254 / sRANKL

Alternate names:

ODF, OPGL, Osteoclast differentiation factor, Osteoprotegerin ligand, RANK Ligand, RANKL, Receptor activator of nuclear factor kappa B ligand, TNF-related activation-induced cytokine, TNFSF11, TRANCE, Tumor necrosis factor ligand superfamily member 11

Quantity:

2 µg

Background:

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 naive 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.

Uniprot ID:

[O35235](#)

NCBI:

[NP_035743.2](#)

GeneID:

[21943](#)

Species:

Mouse

Source:

E. coli

Format:

State: Sterile filtered, Lyophilized protein.

Purity: >98% pure by SDS-PAGE and HPLC analyses.

Buffer System: 5 mM Sodium Phosphate, pH 7.6, + 75 mM NaCl

Endotoxin Level: < 0.1 ng per µg (1EU/µg).

Reconstitution: Restore in Water to a concentration of 0.1-1.0 mg/ml.

This solution can then be diluted into other aqueous buffers and stored at 4°C for one week or at -20°C for future use.

Description:

Recombinant Murine sRANKL is a 19.4 kDa polypeptide comprising the TNF homologous region of RANKL (174 amino acid residues).

AA Sequence:

PAMMEGSWLD VAQRGKPEAQ PFAHLTINAA SIPSGSHKVT LSSWYHDRGW AKISNMTLSN
GKLRVNQDGF YYLYANICFR HHETSGSVPT DYQLMVYVV KTSIKIPSSH NLMKGGSTKN
WSGNSEFHFY SINVGFFFL RAGEEISIQV SNPSLLDPDQ DATYFGAFKV QDID

Biological Activity: Determined by its ability to induce NFκappaB in RAW264.7 cells in the absence of any cross-linking.

The expected **ED50** for this effect is 10.0-25.0 ng/ml.

Molecular weight: 19.4 kDa (174 aa)

Add. Information:

Centrifuge the vial prior to opening.

Storage:

The lyophilized protein is stable for one year from despatch at -20°C.
Reconstituted sRANKL is stable for 3 months when stored in working aliquots with a carrier protein at -20°C.