



## RANK ligand, soluble, mouse recombinant (rmsRANKL)

**Catalog No:** 94938  
**Lot No:** XXXXX  
**Source:** *E. coli*  
**Synonyms:** Soluble Receptor Activator of NFkB Ligand, TNFSF11, TRANCE, TNF-related activation-induced cytokine, OPGL, ODF, Osteoclast differentiation factor, Tumor necrosis factor ligand superfamily member 11, Receptor activator of nuclear factor kappa B ligand, RANKL, Osteoprotegerin ligand, CD254 antigen, sRANKL, sOdf, hRANKL2

### Background

RANKL 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. sRANKL may also play an important role in enhanced bone-resorption in humoral hypercalcemia of malignancy.

### Description

sRANKL mouse recombinant produced in *E. coli* is single, non-glycosylated, polypeptide chain containing 174 amino acids and having a total molecular mass of 19.9 kDa. CD254 is purified by proprietary chromatographic techniques.

### Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

### Formulation

The protein (1 mg/ml) was lyophilized with 10 mM Na<sub>2</sub>PO<sub>4</sub>, pH 7.5 and 50 mM NaCl.

### Solubility

It is recommended to reconstitute the lyophilized sRANKL in sterile 18 MΩ-cm H<sub>2</sub>O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

### Stability

Lyophilized TNFSF11, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution sRANKL should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

### Purity

Greater than 95.0% as determined by SDS-PAGE.

### Amino Acid Sequence

PAMMEGSWLD VAQRGKPEAQ PFAHLTINAA SIPSGSHKVT LSSWYHDRGW AKISNMTLSN GKLRVNQDGF YYLYANICFR  
HHETSGSVPT DYQLMVYVY KTSIKIPSSH NLMKGGSTKN WSGNSEHFY SINVGGFVKL RAGEEISIQV SNPSLLDPDQ  
DATYFGAFKV QDID

### Activity

Measured by its ability to induce osteoclast formation on murine RAW264.7 cells using a concentration of 50 ng/ml shown in "Corning® Osteo Assay Surface 24 Well Plates with Transwell® Permeable Supports- A Useful Tool for Co-Culture Studies" by Rebecca M.

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#### Usage

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