



## Product Datasheet

<b>Product Name</b>	RANK Ligand Soluble Human Recombinant
<b>Cata No</b>	CB500236
<b>Source</b>	Escherichia Coli.
<b>Synonyms</b>	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.

### Description

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. sRANKL Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 176 amino acids and having a molecular mass of 20006 Dalton. CD254 is purified by proprietary chromatographic techniques.

### Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

### Formulation

The protein was lyophilized from a concentrated (1mg/ml) solution containing 10mM Tris, pH-7.6 and 50mM sodium chloride.

### Solubility

It is recommended to reconstitute the lyophilized sRANKL in sterile 18MΩ-cm H<sub>2</sub>O at a concentration of 100µg/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 98.0% as determined by:  
(a) Analysis by RP-HPLC.  
(b) Analysis by SDS-PAGE.

### Biological Activity

The activity is determined by its ability to induce osteoclast formation in RAW264.7 cells using a conc. of 5.0-10.0 ng/ml and by dose dependant stimulation of IL-8 production in human PBMC which was found to be <10ng/ml.

**\* For Non-Clinical Research Use Only \***