

## Recombinant human Soluble RANK Ligand (rh sRANKL / CD254)

**Synonyms:** Soluble Receptor Activator of NFκB 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.

**Introduction:** 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:** Recombinant human RANKL (soluble) produced in *E. coli* is a single, non-glycosylated polypeptide chain containing 176 amino acids and having a molecular mass of 20 kDa.

**Source:** *Escherichia Coli*.

**Physical Appearance:** Sterile filtered white lyophilized (freeze-dried) powder.

**Formulation:** lyophilized from a concentrated (1mg/ml) solution containing 10mM Na<sub>2</sub>PO<sub>4</sub>, pH 8.0

The aliquots of 1µg and 2µg contain Trehalose 5% (w/vol) for better recovery.

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

**Stability:** Lyophilized rh sRANKL although stable at room temperature for 3 weeks, should be stored desiccated below -18° C . Upon reconstitution rh sRANKL should be stored at 4° C between 2-7 days and for future use below -18°. 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 90.0% as determined by SDS-PAGE.

**Amino acid sequence:** MEKAMVDGSW LDLAKRSKLE AQPFAHLTIN ATDIPSGSHK VSLSSWYHDR GWAKISNMTF SNGKLIVNQD GFYYLYANIC FRHHETSGDL ATEYLQLMVY VTKTSIKIPS SHTLMKGGST KYWSGNSEFH FYSINVG GFF KLRS GEEISI EVSNP SLLDP DQDATYFGAF KVRDID.

**Biological Activity:** The activity is determined by a dose dependant stimulation of IL-8 production in human PBMC and is typically less than 100ng/ml, corresponding to a specific activity of 10,000 units/mg.

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<i>small</i>	2 µg	Cat.N°	11343452
<i>medium</i>	10 µg	Cat.N°	11343453
<i>large</i>	50 µg	Cat.N°	11343455

**ImmunoTools** Excellent Quality - Advantageously priced

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