

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 19.7 kDa.

Source: *Escherichia Coli*.

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

Formulation: Lyophilized from a concentrated (1mg/ml) solution containing 10mM sodium phosphate, pH-7.5. 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 H₂O 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 95.0% as determined by SDS-PAGE.

Amino acid sequence: MEKAMVDGSW LDLAKRSKLE AQPFAHLTIN ATDIPSGSHK VSLSSWYHDR
GWAKISNMTF SNGKLIVNQD GFYYLYANIC FRHHETSGDL ATEYLQLMVY VTKTSIKIPS SHTLMKGGST
KYWSGNSEFH FYSINVG GFF KLRSGEEISI EVSNPSLLDP 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.

This material is offered for **research only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

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

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