

Recombinant Mouse Soluble RANK Ligand (rm sRANKL / CD254)

Synonyms: Soluble Receptor Activator of NFκB Ligand, TNFSF11, TRANCE, TNF-related activation-induced cytokine, osteoprotegerin ligand (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.

Introduction: RANKL binds to tnfrsf11b/opg and to tnfrsf11a/rank. Osteoclast differentiation and activation factor. It 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 mouse RANKL (soluble) produced in E.coli is single, non-glycosylated, polypeptide chain containing 174 amino acids and having a total molecular mass of 19.9kDa. The rm sRANKL is purified by proprietary chromatographic techniques.

Source: *Escherichia Coli*.

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

Formulation: The protein (1mg/ml) was lyophilized with 10mM Na₂PO₄, pH 7.5 and 50mM NaCl.

Solubility: It is recommended to reconstitute the lyophilized rm sRANKL in sterile 18MΩ-cm H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Stability: Lyophilized rm sRANKL although stable at room temperature for 3 weeks, should be stored desiccated below -18° C . Upon reconstitution rm 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: PAMMEGSWLD VAQRGKPEAQ PFAHLTINAA SIPSGSHKVT LSSWYHDRGW AKISNMTLSN GKLRVNQDGF YYLYANICFR HHETSGSVPT DYQLQMVYVV KTSIKIPSSH NLMKGGSTKN WSGNSEFHFY SINVGFFKL RAGEEISIQV SNPSLLDPDQ DATYFGAFKV QDID.

Biological Activity: Measured by its ability to induce osteoclast formation on murine RAW264.7 cells using a concentration of 50ng/ml shown in "Corning® Osteo Assay Surface 24 Well Plates with Transwell® Permeable Supports- A Useful Tool for Co-Culture Studies" by Rebecca M. Wood and Mark Rothenber, corresponding to a specific activity of 20,000Units/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°	12343452
<i>medium</i>	10 µg	Cat.N°	12343453

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