

Recombinant Mouse Soluble RANK Ligand (rm sRANKL / CD254)

Synonyms: soluble Receptor Activator of Nuclear factor Kappa B Ligand, TNF-related activation-induced cytokine (TRANCE), Osteoprotegerin ligand (OPGL), Osteoclast differentiation factor (ODF), Tumor necrosis factor ligand superfamily member 11 (TNFSF11)

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 175 amino acids and having a total molecular mass of 19.5kDa. 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 20mM NaCl.

Solubility: It is recommended to reconstitute the lyophilized rm sRANKL in sterile 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: MPAMMEGSWL DVAQRGKPEA QPFAHLTINA ASIPSGSHKV TLSSWYHDRG WAKISNMTLS NGKLRVNQDG FYYLYANICF RHHETSGSVP TDYLQLMVYV VKTSIKIPSS HNLKMGGSTK NWSGNSEFHF YSINVGFFK LRAGEEISIQ VSNPSELLDPD QDATYFGAFK VQDID.

Biological Activity: Measured by its ability to induce TNF-alpha production in mouse RAW264.7 cells. The ED50 is < 50ng/ml, corresponding to a specific activity of 8.8x10⁴ Units/mg.

This material is offered for **research use 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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