Recombinant human Soluble RANK Ligand (rh sRANKL / CD254)

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

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 175 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 H_2O not less than 100 μ g/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: EKAMVDGSW LDLAKRSKLE AQPFAHLTIN ATDIPSGSHK VSLSSWYHDR GWAKISNMTF SNGKLIVNQD GFYYLYANIC FRHHETSGDL ATEYLQLMVY VTKTSIKIPS SHTLMKGGST KYWSGNSEFH FYSINVGGFF KLRSGEEISI EVSNPSLLDP DQDATYFGAF KVRDID.

Biological Activity: The activity of RAW-Blue was measured to be 38.8 ng/ml, corresponding to a specific activity of $2.6 \times 10^4 \text{ units/mg}$.

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small	2 μg	Cat.N°	11343452
medium	10 µg	Cat.N°	11343453
large	50 µg	Cat.N°	11343455