

Recombinant Human sRANK Ligand(Human sRANKL)

Product Information

| Product Name | Cat# | Size |
|---|-----------|--------|
| Recombinant Human sRANK Ligand(Human RANKL) | 90629ES50 | 50 µg |
| | 90629ES76 | 500 µg |

Product Description

RANKL and RANK are members of the TNF superfamily of ligands and receptors that play an important role in the regulation of specific immunity and bone turnover. RANK (receptor) was originally identified as a dendritic cell-membrane protein, which, by interacting with RANKL, augments the ability of dendritic cells. These dendritic cells then stimulate naïve T-cell proliferation in a mixed lymphocyte reaction, promote the survival of RANK+ T-cells, and regulate T-cell-dependent immune response. RANKL, which is expressed in a variety of cells, including osteoblasts, fibroblasts, activated T-cells and bone marrow stromal cells, is also capable of interacting with a decoy receptor called OPG. Binding of soluble OPG to sRANKL inhibits osteoclastogenesis by interrupting the signaling between stromal cells and osteoclastic progenitor cells, thereby leading to excess accumulation of bone and cartilage.

Product Properties

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| Synonyms | soluble Receptor Activator of NF-κB Ligand, TNFSF11, TRANCE (TNF-related activation-induced cytokine), OPGL, ODF |
| Accession | O14788 |
| Source | HEK293 Cells-derived human sRANKL protein, Gly64-Asp245 |
| Molecular Weight | Approximately 20.5 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of the protein is approximately 27 kDa due to the glycosylation. |
| AA Sequence | VALFFYF RAQMDPNRIS EDGTHCIYRI LRLHENADFQ DTTLESQDTK LIPDSCRRIK QAFQGAVQKE LQHIVGSQHI RAEKAMVDGS WDLAKRSKL EAQPF AHLTI NATDIPSGSH KVSLSSWYHD RGWAKISNMT FSNGKLIVNQ DGFYYLYANI CFRHHETSGD LATEYLQLMV YVTKT |
| Tag | None |
| Physical Appearance | Sterile Filtered White lyophilized (freeze-dried) powder. |
| Purity | > 85% by SDS-PAGE. |
| Biological Activity | <ol style="list-style-type: none"> 1. Immobilized human TNFSF11 at 2 µg/ml (100 µL/well) can bind human Osteoprotegerin hFc, the EC₅₀ of human Osteoprotegerin hFc is 5-40 ng/mL. 2. The bioactivity of hRANKL was determined by measuring the ability of hRANKL to induce TRAP activity in Raw 264.7 cells. The ED₅₀ for this effect is typically 1.5-7.5 ng/mL. |
| Endotoxin | < 1.0 EU per 1µg of the protein by the LAL method. |
| Formulation | Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4. We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. |
| Reconstitution | Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20°C. Further dilutions should be made in appropriate buffered solutions. |

Shipping and Storage

The products are shipped with ice pack and can be stored at -20°C to -80°C for 1 year.

Recommend to aliquot the protein into smaller quantities when first used and avoid repeated freeze-thaw cycles.

Cautions

1. Avoid repeated freeze-thaw cycles.
2. For your safety and health, please wear lab coats and disposable gloves for operation.
3. For research use only.