

Recombinant Mouse sRANKL

Catalog # FL124

Product Specifications

Appearance	Sterile filtered White lyophilized (freeze-dried) powder.
Purity	> 96% by SDS-PAGE or HPLC.
Endotoxin	< 0.01 EU/ μ g of rMusRANKL protein as determined by LAL method.
Expression System	Expressed in E. coli.
Species	Mouse
Tag	Tag free.
Activity	Fully biologically active when compared to standard. Determined by its dose-dependent ability to induce reporter gene in HT-29 NF- κ B Luc reporter cells, The ED50 for this effect is 0.5-2 ng/ml.
Formulation	Lyophilized from a 0.2 μ m filtered concentrated solution in 20 mMPB, with 300 mM NaCl, pH 7.4.
Reconstitution	Before use this product, please read the direction below carefully. This vial must be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a 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 \leq -20°C. Further dilutions should be made in appropriate buffered solutions.
Accession #	O35235 Pro143-Asp316
Amino acid sequence	PAMMEGSWLDVAQRGKPEAQPF AHLTINAASIPSGSHKVTLSWYHDRGWAKISNMTLSNGKLRVNQDGFYYLYANICFR HHETSGSVPTDYLQLMVVVKTSIKIPSSHNLMKGGSTKNWVSGNSEHFYFYSINVGGFVKLRAGEEISIQVSNPSLLDPDQDA TYFGAFKVQDID
Molecular weight	Approximately 19.4 kDa, a single non-glycosylated polypeptide chain containing 174 amino acids.
Stability & Storage	Shipped on wet ice. For long term storage, the product should be stored \leq -20°C. Please avoid repeated freeze-thaw cycles after reconstitution. 36 months from date of receipt, -20 to -70°C as supplied. 1 month, 2 to 8°C under sterile conditions after reconstitution. 3 months, -20 to -70°C under sterile conditions after reconstitution.
Precautions	Recombinant Mouse sRANKL is for research use only and not for use in diagnostic or therapeutic procedures.

Background

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 naive 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. Recombinant Mouse sRANKL is a 19.4kDa polypeptide comprising the TNF-homologous region of RANKL.

