

### 32-20513: Recombinant Rat sRANK Ligand(Discontinued)

**Reactivity :** Human, Mouse, Rabbit, Rat

**Alternative Name :** soluble Receptor Activator of NF- $\kappa$ B Ligand, TNFSF11, TRANCE (TNF-related activation-induced cytokine), OPGL, ODF (Osteoclast differentiation factor)

#### Description

**Source:** E.coli 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. Recombinant Rat sRANKL is a 19.4 kDa polypeptide comprising the TNF homologous region of RANKL (174 amino acid residues).

#### Product Info

**Amount :** 2  $\mu$ g / 10  $\mu$ g

**Purification :** Purity:  $\geq$  98% by SDS-PAGE gel and HPLC analyses.

**Content :** This recombinant protein is supplied in lyophilized form.

**Amino Acid :** PAMMEGSWLD VARRGKPEAQ PFAHLTINAA DIPSGSHKVS LSSWYHDRGW AKISNMTLSN  
GKLRVNQDGF YYLYANICFR HHETSGSVPA DYQLMVYVV KTSIKIPSSH NLMKGGSTKN  
WSGNSEFHFY SINVGGFKL RAGEEISVQV SNPSLLDPDQ DATYFGAFKV QDID

#### Application Note

Determined by its ability to induce NF- $\kappa$ B in RAW264.7 cells in the absence of any cross-linking. The expected  $ED_{50}$  for this effect is 10.0-25.0 ng/ml.