PRODUCT DATA SHEET

Product: **RANK(human):Fc(human) (recombinant)**

Cat. No.: **BP-018 (50 µg)**

Synonyms:
TRANCE-R; ODFR; TNFRSF 11A; CD265

Background:
RANK receptor and RANK ligand (RANKL) are members of the TNF superfamily of receptors and ligands that play an important role in the regulation of specific immunity and bone turnover. RANK was originally identified as a dendritic-cell-membrane protein, which by interacting with RANKL augments the ability of dendritic cells to stimulate naïve T cell proliferation in a mixed lymphocyte reaction, to promote the survival of RANK+ T cells and to 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 soluble RANKL (sRANKL) inhibits osteoclastogenesis by interrupting the signaling between stromal cells and osteoclastic progenitor cells, thereby leading to excess accumulation of bone and cartilage. Human recombinant sRANKL is a 20.0 kDa polypeptide comprising the TNF homologous region of RANKL (176 amino acid residues).

Biological Activity:
Inhibits human recombinant sRANKL-induced survival of dendritic cells and osteoclasts.

Specificity:
Binds human and mouse RANKL

Source:
Produced in HEK 293 cells. The cysteine-rich region of human RANK (aa 29-213) is fused to the Fc portion of human IgG_1.

Purity:
≥95% by SDS-PAGE analysis. Endotoxin level is less than 0.1 EU/µg purified protein.

Format:
Lyophilized. Contains PBS. Reconstitute with 50 µL sterile water for a 1 mg/mL solution. Further dilutions should be made with medium containing 5% fetal calf serum.

Storage and Stability:
The lyophilized protein is stable for 6 months at -20°C. Reconstituted protein should be stored in working aliquots at -20°C.

Reconstitution and Suggested Dilutions:
We recommend a quick spin followed by reconstitution in 50 µL of water. Further dilutions should be made with medium containing 5% fetal calf serum.

Limitations:
For *in vitro* research use only. Not for use in diagnostics or in humans.

Warranty:
No warranties, expressed or implied, are made regarding the use of this product. KAMIYA BIOMEDICAL COMPANY is not liable for any damage, personal injury, or economic loss caused by this product.