10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

sRANK Receptor, human recombinant protein

soluble Receptor Activator of NFkB Ligand, TNFSF11, TRANCE (TNF-related activation-induced cytokine)

Catalog # PBV10823r

Specification

sRANK Receptor, human recombinant protein - Product info

Primary Accession	O14788
Calculated MW	**19.3 kDa KDa**

sRANK Receptor, human recombinant protein - Additional Info

Gene ID	**8600**
Gene Symbol	**RANKL**

Other Names
soluble Receptor Activator of NFkB Ligand, TNFSF11, TRANCE (TNF-related activation-induced cytokine), OPGL, ODF (Osteoclast differentiation factor)

Gene Source	**Human**
Source	**E. Coli**
Assay&Purity	**SDS-PAGE; ≥98%**
Assay2&Purity2	**HPLC;**
Recombinant	**Yes**
Sequence	**MQIAPPCTSE KHYEHLGRCC NKCEPGKYMS SKCTTTSDSV CLPCGPDEYL DSWNEEDKCL LHKVCDTGKA LVAVVAGNST TPRRCACTAG YHWSQDCECC RRNTECAPGL GAQHPLQLNK DTVCKPCLAG YFSDAFSSTD KCRPWTNCTF LGKRVEHHGT EKSDAVCSSS LPARK**

Target/Specificity
sRANKR

Application Notes
Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

Format
Lyophilized powder

Storage
-20°C; Sterile filtered through a 0.2 micron filter. Lyophilized from 10 mM Sodium Phosphate, pH 7.2.

sRANK Receptor, human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

sRANK Receptor, human recombinant protein - Images

sRANK Receptor, human recombinant protein - 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 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 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).

sRANK Receptor, human recombinant protein - References

Anderson D.M.,et al.Nature 390:175-179(1997).
Lacey D.L.,et al.Cell 93:165-176(1998).
Ikeda T.,et al.Submitted (JUN-2001) to the EMBL/GenBank/DDBJ databases.
Nagai M.,et al.Biochem. Biophys. Res. Commun. 269:532-536(2000).
Wong B.R.,et al.J. Biol. Chem. 272:25190-25194(1997).