

# sRANK Ligand Polyclonal Antibody

Rabbit Polyclonal Antibody Catalog # ABV10997

### **Specification**

## sRANK Ligand Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW

WB 035235 Mouse Rabbit Polyclonal Rabbit IgG 35003

### sRANK Ligand Polyclonal Antibody - Additional Information

Gene ID 21943

Application & Usage

Western blotting (0.5-4  $\mu$ g/ml). However, the optimal concentrations should be determined individually.

**Other Names** 

RANK Ligand, RANKLigand, Receptor activator of nuclear factor kappa B ligand, TNF-related activation-induced cytokine, Osteoprotegerin ligand

Target/Specificity RANKL

Antibody Form Liquid

Appearance Colorless liquid

**Formulation** 

100  $\mu$ g (1 mg/ml) rabbit polyclonal antibody in phosphate-buffered saline (PBS) containing 30% glycerol, 0.5% BSA, and 0.01% thimerosal.

Handling The antibody solution should be gently mixed before use.

Reconstitution & Storage -20 °C

**Background Descriptions** 

#### Precautions

sRANK Ligand Polyclonal Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



## sRANK Ligand Polyclonal Antibody - Protein Information

Name Tnfsf11

Synonyms Opgl, Rankl, Trance

### Function

Cytokine that binds to TNFRSF11B/OPG and to TNFRSF11A/RANK. Osteoclast differentiation and activation factor (PubMed:<a href="http://www.uniprot.org/citations/22437732" target=" blank">22437732</a>). Augments the ability of dendritic cells to stimulate naive T-cell proliferation. May be an important regulator of interactions between T- cells and dendritic cells and may play a role in the regulation of the T-cell-dependent immune response. May also play an important role in enhanced bone-resorption in humoral hypercalcemia of malignancy (By similarity). Induces osteoclastogenesis by activating multiple signaling pathways in osteoclast precursor cells, chief among which is induction of long lasting oscillations in the intracellular concentration of Ca (2+) resulting in the activation of NFATC1, which translocates to the nucleus and induces osteoclast-specific gene transcription to allow differentiation of osteoclasts (PubMed:<a href="http://www.uniprot.org/citations/18586671" target=" blank">18586671</a>, PubMed:<a href="http://www.uniprot.org/citations/24039232" target=" blank">24039232</a>, PubMed:<a href="http://www.uniprot.org/citations/27336669" target="blank">27336669</a>). During osteoclast differentiation, in a TMEM64 and ATP2A2-dependent manner induces activation of CREB1 and mitochondrial ROS generation necessary for proper osteoclast generation (PubMed:<a href="http://www.uniprot.org/citations/23395171" target=" blank">23395171</a>, PubMed:<a href="http://www.uniprot.org/citations/26644563" target=" blank">26644563</a>).

**Cellular Location** 

[Isoform 1]: Cell membrane; Single-pass type II membrane protein [Isoform 3]: Cytoplasm.

## Tissue Location

Highly expressed in thymus and lymph nodes, but not in non-lymphoid tissues and is abundantly expressed in T-cells but not in B-cells. A high level expression is also seen in the trabecular bone and lung

## sRANK Ligand Polyclonal Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## sRANK Ligand Polyclonal Antibody - Images

## sRANK Ligand Polyclonal Antibody - Background

RANK (receptor activator of NF-kB) is a member of the TNFR family, identified as a dendritic cell membrane protein. Murine sRANK Ligand is a soluble 19.4 kDa protein, comprising the TNF-like extracellular domain of RANKL (174 amino acids). The full length of RANK Ligand is 39.6 kDa containing 36 amino acids.