

**RANKL Antibody**  
**Rabbit Polyclonal Antibody**  
**Catalog # ABV10919****Specification**

---

**RANKL Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">O14788</a>
Other Accession	<a href="#">BAB71768</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	35478

**RANKL Antibody - Additional Information****Gene ID** 8600

Application & Usage	<b>Western blot analysis (0.5-4 µg/ml). However, the optimal conditions should be determined individually. Recombinant human sRANK Ligand can be used as a positive control.</b>
---------------------	--

**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 µg (0.5 mg/ml) affinity purified rabbit anti-hsRANKL polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, 0.01% thimerosal.

**Handling**

The antibody solution should be gently mixed before use.

**Reconstitution & Storage**

-20 °C

**Background Descriptions**

**Precautions**

RANKL Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**RANKL 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. 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 (PubMed:<a href="http://www.uniprot.org/citations/22664871" target="\_blank">22664871</a>). 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. During osteoclast differentiation, in a TMEM64 and ATP2A2-dependent manner induces activation of CREB1 and mitochondrial ROS generation necessary for proper osteoclast generation (By similarity).

**Cellular Location**

[Isoform 1]: Cell membrane; Single-pass type II membrane protein [Isoform 2]: Cytoplasm.

**Tissue Location**

Highest in the peripheral lymph nodes, weak in spleen, peripheral blood Leukocytes, bone marrow, heart, placenta, skeletal muscle, stomach and thyroid

**RANKL Antibody - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**RANKL Antibody - Images****RANKL Antibody - Background**

Human RANK (receptor activator of NF- $\kappa$ B) is a member of the TNFR family, identified as a dendritic cell membrane protein. Human soluble RANK Ligand is a soluble 20 kDa polypeptide, comprising the TNF homologous region of RANKL (176 amino acid residues).