

RANKL Antibody

Rabbit Polyclonal Antibody Catalog # ABV10919

Specification

RANKL Antibody - Product Information

Application WB **Primary Accession** 014788 Other Accession BAB71768 Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 35478

RANKL Antibody - Additional Information

Gene ID 8600

Application & Usage 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.

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

 $100~\mu g$ (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:22664871). 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
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

RANKL Antibody - Images

RANKL Antibody - Background

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