

## Summary

<b>Production Name</b>	RANKL Rabbit Polyclonal Antibody
<b>Description</b>	Rabbit Polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,IHC-P,IF-P,IF-F,ICC/IF,ELISA
<b>Reactivity</b>	Human,Mouse,Rat

## Performance

<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Storage</b>	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

## Immunogen

<b>Gene Name</b>	TNFSF11 TNFSF11; OPGL; RANKL; TRANCE; Tumor necrosis factor ligand superfamily member 11; Osteoclast differentiation factor; ODF; Osteoprotegerin ligand; OPGLReceptor activator of nuclear factor kappa-B ligand; RANKL; TNF-related activation-induced cytokine; TRANCE; CD254
<b>Alternative Names</b>	
<b>Gene ID</b>	8600.0
<b>SwissProt ID</b>	O14788.The antiserum was produced against synthesized peptide derived from the C-terminal region of human TNFSF11. AA range:268-317

## Application

<b>Dilution Ratio</b>	WB 1:500-1:2000, IHC-P 1:100-300, ELISA 1:20000, IF-P/IF-F/ICC/IF 1:100-300, Not yet
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**Catalog #: APRab16887**



tested in other applications.

**Molecular Weight** 35kDa

## Background

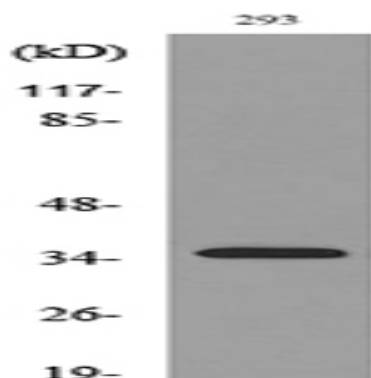
This gene encodes a member of the tumor necrosis factor (TNF) cytokine family which is a ligand for osteoprotegerin and functions as a key factor for osteoclast differentiation and activation. This protein was shown to be a dendritic cell survival factor and is involved in the regulation of T cell-dependent immune response. T cell activation was reported to induce expression of this gene and lead to an increase of osteoclastogenesis and bone loss. This protein was shown to activate antiapoptotic kinase AKT/PKB through a signaling complex involving SRC kinase and tumor necrosis factor receptor-associated factor (TRAF) 6, which indicated this protein may have a role in the regulation of cell apoptosis. Targeted disruption of the related gene in mice led to severe osteopetrosis and a lack of osteoclasts. The deficient mice exhibited defects in early differentiation of T and B lymphocytes. Defects in TNFSF11 are the cause of osteopetrosis autosomal recessive type 2 (OPTB2) [MIM:259710]; also known as osteoclast-poor osteopetrosis. Osteopetrosis is a rare genetic disease characterized by abnormally dense bone, due to defective resorption of immature bone. The disorder occurs in two forms: a severe autosomal recessive form occurring in utero, infancy, or childhood, and a benign autosomal dominant form occurring in adolescence or adulthood. Autosomal recessive osteopetrosis is usually associated with normal or elevated amount of non-functional osteoclasts. OPTB2 is characterized by paucity of osteoclasts, suggesting a molecular defect in osteoclast development. **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. **induction:** Up-regulated by T-cell receptor stimulation. **PTM:** The soluble form of isoform 1 derives from the membrane form by proteolytic processing (By similarity). The cleavage may be catalyzed by ADAM17. **similarity:** Belongs to the tumor necrosis factor family. **subunit:** Homotrimer. **tissue specificity:** Highest in the peripheral lymph nodes, weak in spleen, peripheral blood Leukocytes, bone marrow, heart, placenta, skeletal muscle, stomach and thyroid.

## Research Area

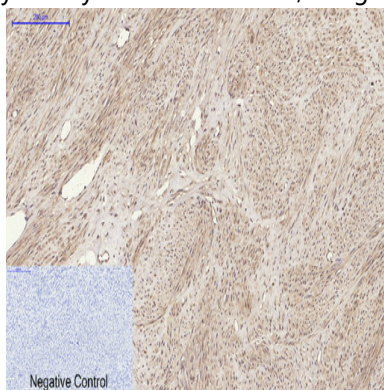
Cytokine-cytokine receptor interaction;

## Image Data

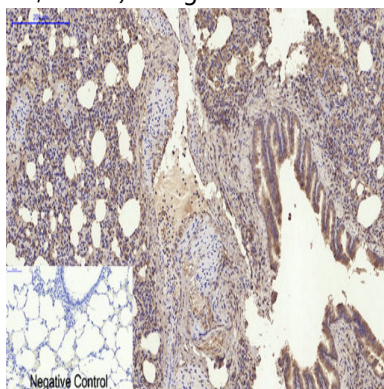
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Western blot analysis of lysate from 293 cells, using TNFSF11 Antibody.

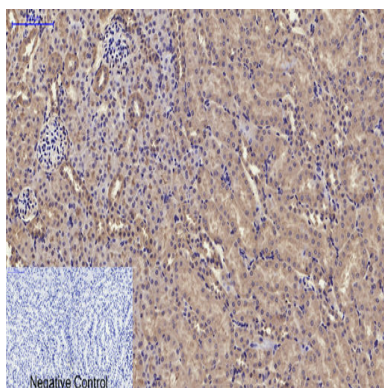


Immunohistochemical analysis of paraffin-embedded Human-uterus tissue. 1,RANKL Polyclonal Antibody was diluted at 1:200 (4°C,overnight) . 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C,20min) . 3,Secondary antibody was diluted at 1:200 (room tempeRature, 30min) . Negative control was used by secondary antibody only.

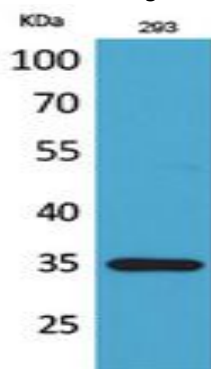


Immunohistochemical analysis of paraffin-embedded Rat-lung tissue. 1,RANKL Polyclonal Antibody was diluted at 1:200 (4°C,overnight) . 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C,20min) . 3,Secondary antibody was diluted at 1:200 (room tempeRature, 30min) . Negative control was used by secondary antibody only.

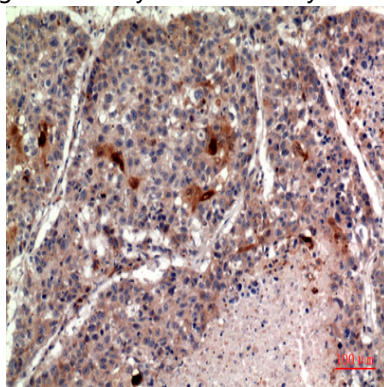
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Immunohistochemical analysis of paraffin-embedded Mouse-kidney tissue. 1, RANKL Polyclonal Antibody was diluted at 1:200 (4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C, 20min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative control was used by secondary antibody only.



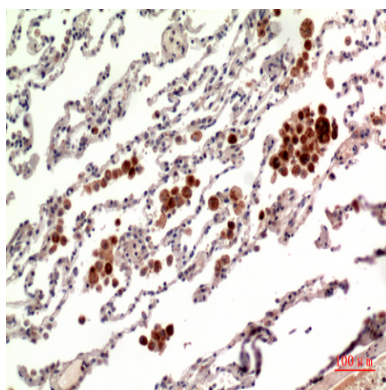
Western Blot analysis of 293 cells using RANKL Polyclonal Antibody. Secondary antibody was diluted at 1:20000.



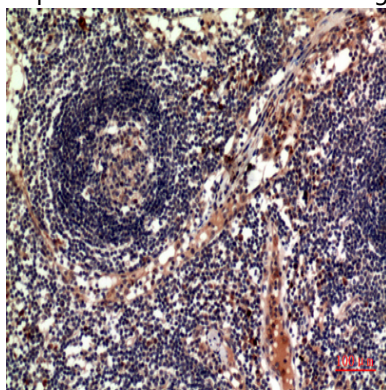
Immunohistochemical analysis of paraffin-embedded human-lung, antibody was diluted at 1:100.

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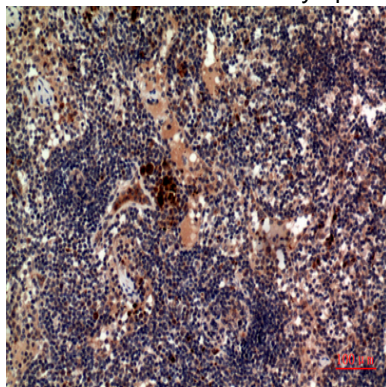
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Immunohistochemical analysis of paraffin-embedded human-lung, antibody was diluted at 1:100



Immunohistochemical analysis of paraffin-embedded human-Lymph-nodes, antibody was diluted at 1:100



Immunohistochemical analysis of paraffin-embedded human-Lymph-nodes, antibody was diluted at 1:100

## **Note**

For research use only.