**Product Name: RANKL Rabbit Polyclonal Antibody**
**Catalog #: APRab16887**

## Summary

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|---|---|
| **Production Name** | RANKL Rabbit Polyclonal Antibody |
| **Description** | Rabbit Polyclonal Antibody |
| **Host** | Rabbit |
| **Application** | WB,IHC,IF,ELISA |
| **Reactivity** | Human,Mouse,Rat |

## Performance

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

## Immunogen

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| **Gene Name** | TNFSF11 |
| **Alternative Names** | 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 |
| **Gene ID** | 8600.0 |
| **SwissProt ID** | O14788.The antiserum was produced against synthesized peptide derived from the C-terminal region of human TNFSF11. AA range:268-317 |

## Application

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| **Dilution Ratio** | WB 1:500 - 1:2000. IHC-p: 1:100-300 ELISA: 1:20000. IF 1:100-300 Not yet tested in |

| | |
|---|---|
| | other applications. |
| **Molecular Weight** | 35kD |

## 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 dentritic 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 lydisease: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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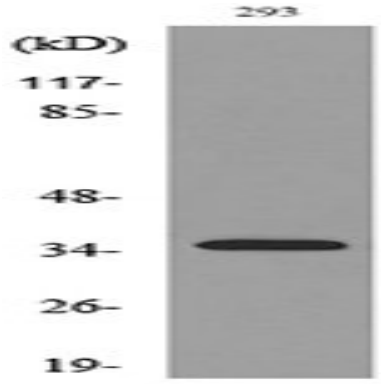
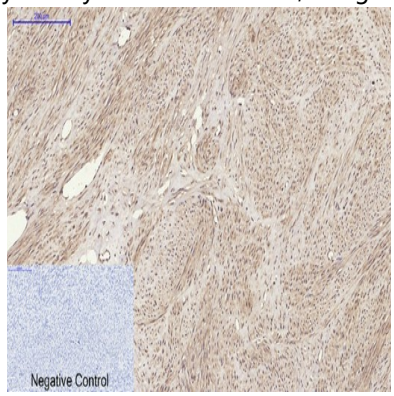
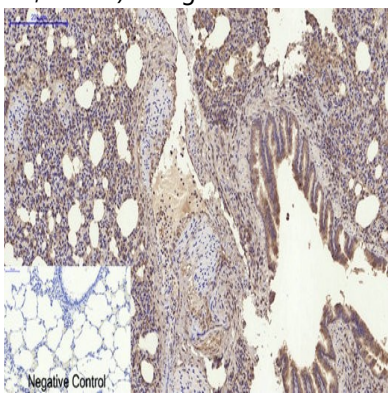



Western blot analysis of lysate from 293 cells, using TNFSF11 Antibody.




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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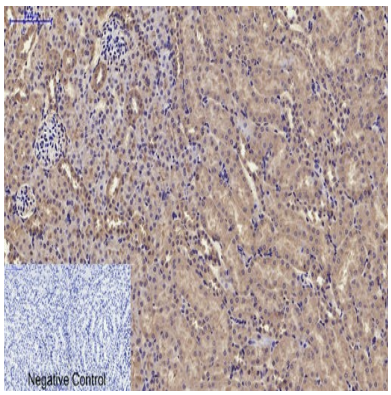
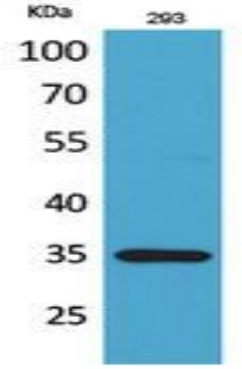
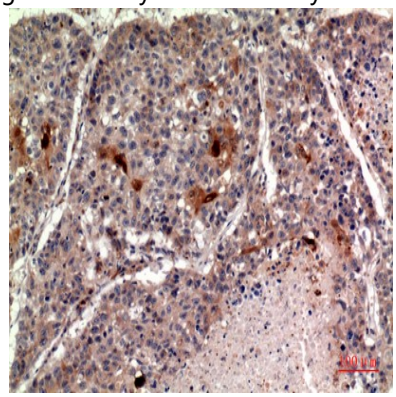



Immunohistochemical analysis of paraffin-embedded Mouse-kidney tissue. 1,RANKL Polyclonal Antibody was diluted at 1:200（4°C,overnight）. 2, Sodium citrate pH 6.0 was used for antibody retrieval（>98°C,20min）. 3,Secondary antibody was diluted at 1:200（room tempeRature, 30min）. Negative control was used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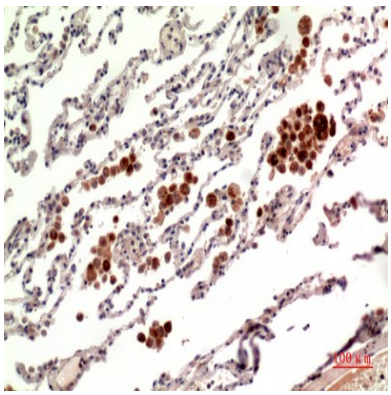
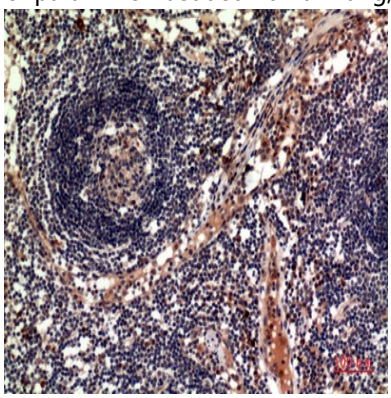
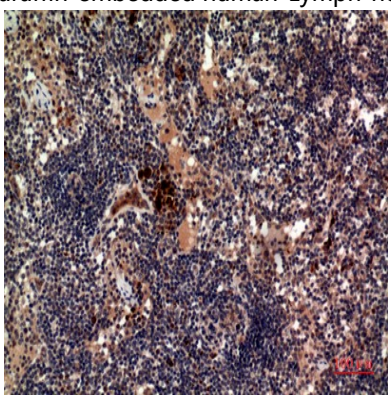


Immunohistochemical analysis of paraffin-embedded human-lung, antibody was diluted at 1:100



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.