



# RANKL Polyclonal Antibody

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Catalog No</b>                  | YP-Ab-14022                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Reactivity</b>                  | Human;Mouse;Rat                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Applications</b>                | WB;IHC;IF;ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Gene Name</b>                   | TNFSF11                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Immunogen</b>                   | The antiserum was produced against synthesized peptide derived from the C-terminal region of human TNFSF11. AA range:268-317                                                                                                                                                                                                                                                                                                                           |
| <b>Specificity</b>                 | RANKL Polyclonal Antibody detects endogenous levels of RANKL protein.                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Source</b>                      | Polyclonal, Rabbit,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Purification</b>                | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                  |
| <b>Dilution</b>                    | Western Blot: 1/500 - 1/2000. IHC-p: 1:100-300 ELISA: 1/20000. IF 1:100-300<br>Not yet tested in other applications.                                                                                                                                                                                                                                                                                                                                   |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Synonyms</b>                    | TNFSF11;Tumor necrosis factor ligand superfamily member 11;TNF-related activation-induced cytokine;Receptor activator of nuclear factor kappa-B ligand; CD254;RANKL;OPGL;TRANCE;Osteoclast differentiation factor;ODF; Osteoprotegerin ligand;OPGLReceptor activator of nuclear factor kappa-B ligand                                                                                                                                                  |
| <b>Observed Band</b>               | 35kD                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Calculated Molecular Weight</b> | 35kD                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Cell Pathway</b>                | [Isoform 1]: Cell membrane; Single-pass type II membrane protein.; [Isoform 3]: Cell membrane; Single-pass type II membrane protein.; [Isoform 2]: Cytoplasm .; [Tumor necrosis factor ligand superfamily member 11, soluble form]: Secreted .                                                                                                                                                                                                         |
| <b>Tissue Specificity</b>          | Highest in the peripheral lymph nodes, weak in spleen, peripheral blood Leukocytes, bone marrow, heart, placenta, skeletal muscle, stomach and thyroid.                                                                                                                                                                                                                                                                                                |
| <b>Function</b>                    | disease: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

## 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 ly

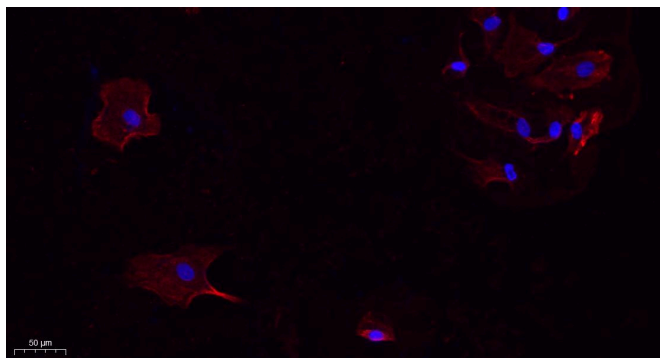
## matters needing attention

Avoid repeated freezing and thawing!

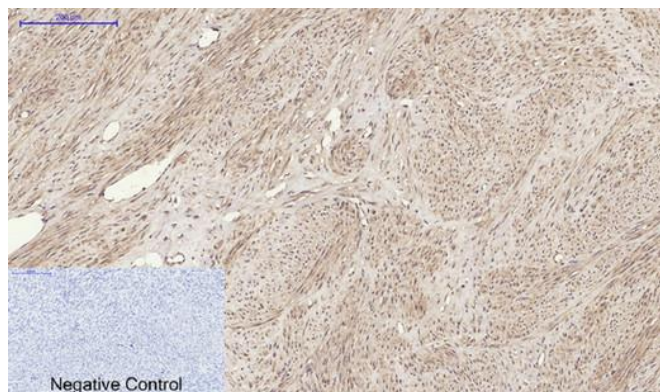
## Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

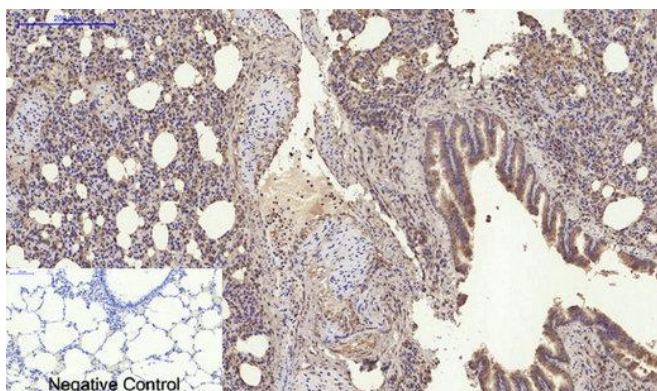
## Products Images



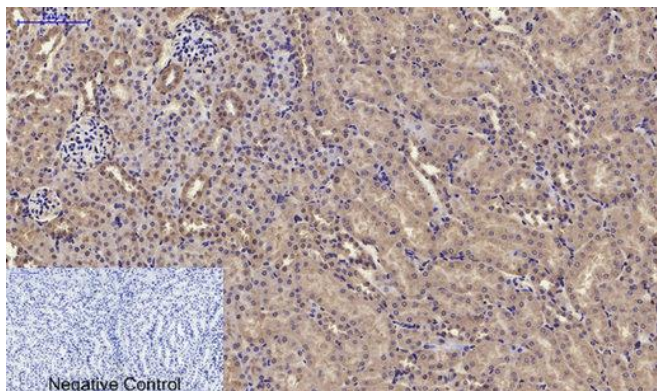
Immunofluorescence analysis of A549. 1, primary Antibody (red) was diluted at 1:200 (4°C overnight). 2, Goat Anti Rabbit IgG (H&L) - Alexa Fluor 594 Secondary antibody was diluted at 1:1000 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min.



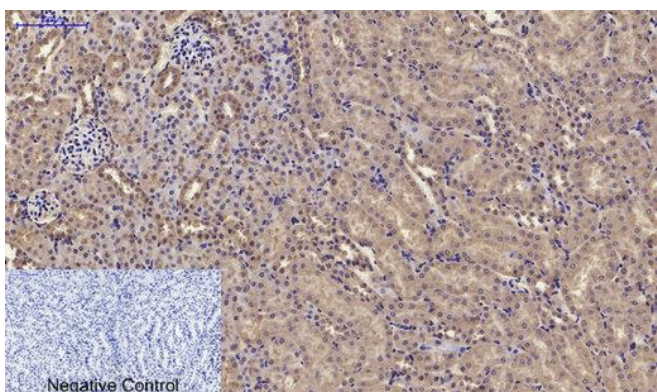
Immunohistochemical analysis of paraffin-embedded Human-uterus tissue. 1, RANKL Polyclonal Antibody was diluted at 1:200 (4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C, 20min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative control was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



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 (catalog#: RS0002) was diluted at 1:20000.