

## RANKL Polyclonal Antibody

<b>Catalog No :</b>	YT5404
<b>Reactivity :</b>	Human;Mouse;Rat
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	RANKL
<b>Fields :</b>	>>Cytokine-cytokine receptor interaction;>>NF-kappa B signaling pathway;>>Osteoclast differentiation;>>Prolactin signaling pathway;>>Parathyroid hormone synthesis, secretion and action;>>Chemical carcinogenesis - receptor activation;>>Breast cancer;>>Rheumatoid arthritis
<b>Gene Name :</b>	TNFSF11
<b>Protein Name :</b>	Tumor necrosis factor ligand superfamily member 11
<b>Human Gene Id :</b>	8600
<b>Human Swiss Prot No :</b>	O14788
<b>Mouse Gene Id :</b>	21943
<b>Mouse Swiss Prot No :</b>	O35235
<b>Rat Gene Id :</b>	117516
<b>Rat Swiss Prot No :</b>	Q9ESE2
<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

**Dilution :** WB 1:500 - 1:2000. IHC: 1:100-300 ELISA: 1:20000. IF 1:100-300 Not yet tested in other applications.

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**Purification :** The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

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**Concentration :** 1 mg/ml

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**Storage Stability :** -15°C to -25°C/1 year(Do not lower than -25°C)

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**Observed Band :** 35kD

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**Cell Pathway :** Cytokine-cytokine receptor interaction;

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**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

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**Function :** 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

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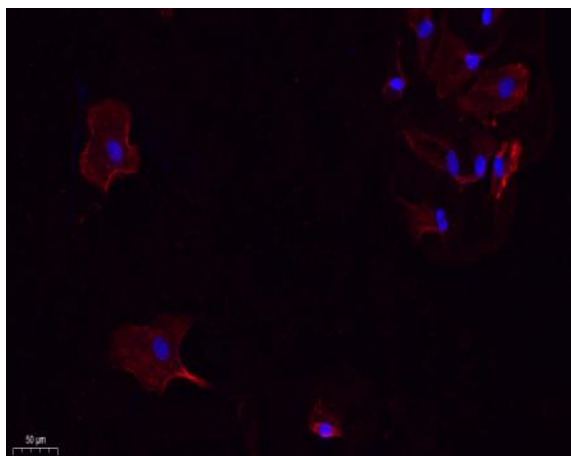
**Subcellular Location :** [Isoform 1]: Cell membrane; Single-pass type II membrane protein.; [Isoform 3]: Cell membrane; Single-pass type II membrane protein.; [Isoform 2]: Cytoplasm .; [Tumor necrosis factor ligand superfamily member 11, soluble form]: Secreted .

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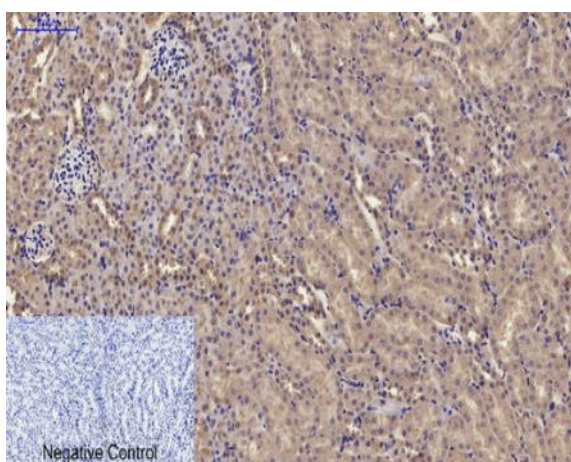
**Expression :** Highest in the peripheral lymph nodes, weak in spleen, peripheral blood Leukocytes, bone marrow, heart, placenta, skeletal muscle, stomach and thyroid.

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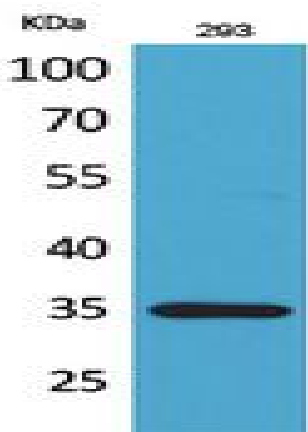
## Products Images



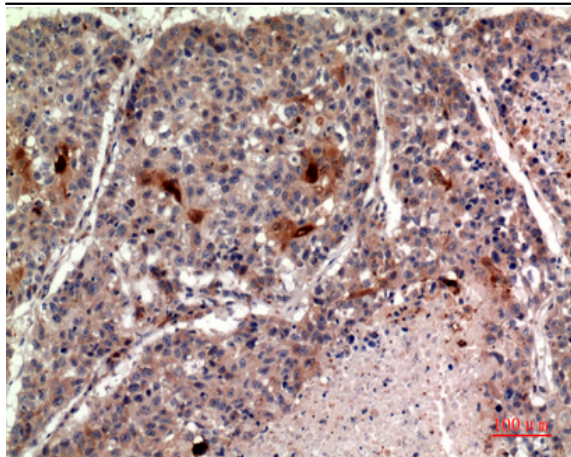
Immunofluorescence analysis of A549. 1, primary Antibody (red) was diluted at 1:200 (4 °C overnight). 2, Goat Anti Rabbit IgG (H&L) - Alexa Fluor 594 Secondary antibody was diluted at 1:1000 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min.



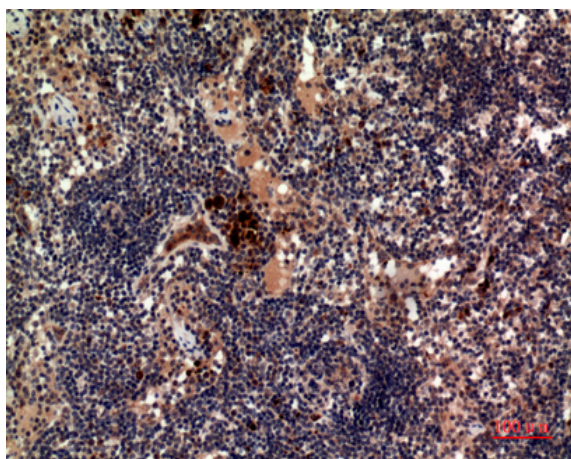
Immunohistochemical analysis of paraffin-embedded Mouse-kidney tissue. 1, RANKL Polyclonal Antibody was diluted at 1:200 (4 °C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98 °C, 20min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative control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



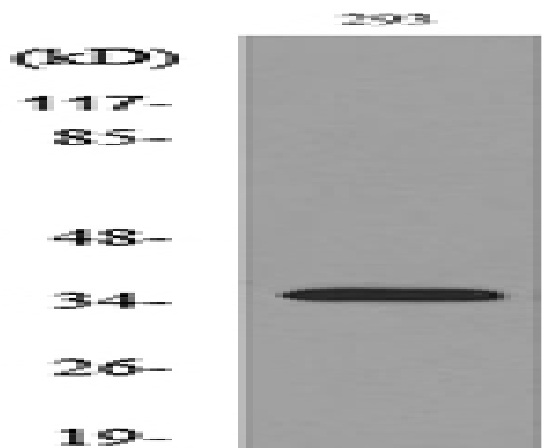
Western Blot analysis of 293 cells using RANKL Polyclonal Antibody. Secondary antibody (catalog#:RS0002) was diluted at 1:20000



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



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