

RANKL Polyclonal Antibody

Catalog No: YT5404

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: RANKL

Fields: >>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

Gene Name: TNFSF11

Protein Name: Tumor necrosis factor ligand superfamily member 11

O14788

O35235

Human Gene Id: 8600

Human Swiss Prot

No:

Mouse Gene Id: 21943

Mouse Swiss Prot

No:

Rat Gene Id: 117516

Rat Swiss Prot No: Q9ESE2

Immunogen: The antiserum was produced against synthesized peptide derived from the C-

terminal region of human TNFSF11. AA range:268-317

Specificity: RANKL Polyclonal Antibody detects endogenous levels of RANKL protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

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Dilution: WB 1:500 - 1:2000. IHC: 1:100-300 ELISA: 1:20000. IF 1:100-300 Not yet

tested in other applications.

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

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

Observed Band: 35kD

Cell Pathway: Cytokine-cytokine receptor interaction;

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 ly

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

Subcellular [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.

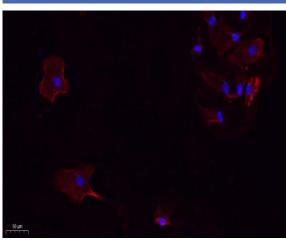
Expression: Highest in the peripheral lymph nodes, weak in spleen, peripheral blood

Leukocytes, bone marrow, heart, placenta, skeletal muscle, stomach and thyroid.

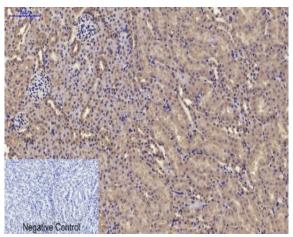
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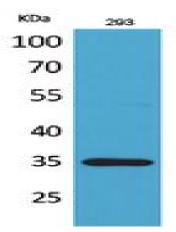
Products Images



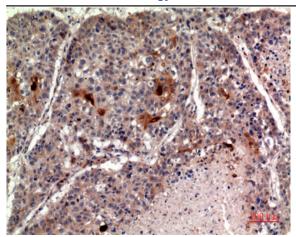
Immunofluorescence analysis of A549. 1,primary Antibody(red) was diluted at 1:200(4°C overnight). 2, Goat Anti Rabbit IgG (H&L) - Alexa Fluor 594 Secondary antibody was diluted at 1:1000(room temperature, 50min).3, Picture B: DAPI(blue) 10min.



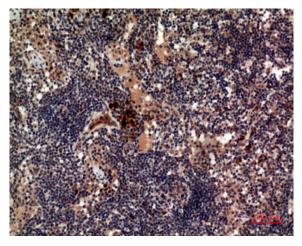
Immunohistochemical analysis of paraffin-embedded Mouse-kidney tissue. 1,RANKL Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used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



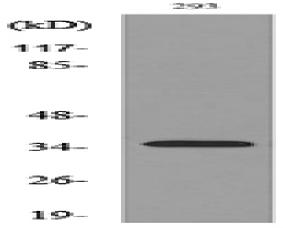
Western Blot analysis of 293 cells using RANKL Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded humanlung, 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.