

OPG Polyclonal Antibody

Catalog No: YT3466

Reactivity: Human; Mouse

Applications: WB;IHC;IF;ELISA

Target: OPG

Fields: >>Cytokine-cytokine receptor interaction;>>Osteoclast differentiation

Gene Name: TNFRSF11B

Protein Name: Tumor necrosis factor receptor superfamily member 11B

Human Gene Id: 4982

Human Swiss Prot

Idiliali Swiss Fiot

No:

Mouse Gene Id: 18383

Mouse Swiss Prot

No:

Immunogen: The antiserum was produced against synthesized peptide derived from human

TR11B . AA range:10-59

O00300

O08712

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

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

Source: 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.

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

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

1/5



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

Observed Band: 55kD

Cell Pathway: Cytokine-cytokine receptor interaction;

Background: The protein encoded by this gene is a member of the TNF-receptor superfamily.

This protein is an osteoblast-secreted decoy receptor that functions as a negative

regulator of bone resorption. This protein specifically binds to its ligand,

osteoprotegerin ligand, both of which are key extracellular regulators of osteoclast development. Studies of the mouse counterpart also suggest that this protein and its ligand play a role in lymph-node organogenesis and vascular calcification. Alternatively spliced transcript variants of this gene have been reported, but their full length nature has not been determined. [provided by RefSeq, Jul 2008],

Function: disease:Defects in TNFRSF11B are the cause of juvenile Paget disease (JPD)

[MIM:239000]; also called hyperostosis corticalis deformans juvenilis or

hereditary hyperphosphatasia or chronic congenital idiopathic

hyperphosphatasia. JPD is a rare autosomal recessive osteopathy that presents in infancy or early childhood. The disorder is characterized by rapidly remodeling woven bone, osteopenia, debilitating fractures, and deformities due to a markedly accelerated rate of bone remodeling throughout the skeleton. Approximately 40 cases of JPD have been reported worldwide. Unless it is treated with drugs that

block osteoclast-mediated skeletal resorption, the disease can be

fatal.,function:Acts as decoy receptor for RANKL and thereby neutralizes its function in osteoclastogenesis. Inhibits the activation of osteoclasts and promotes

osteoclast apoptosis in vitro. Bone homeostasis seems to depen

Subcellular Location:

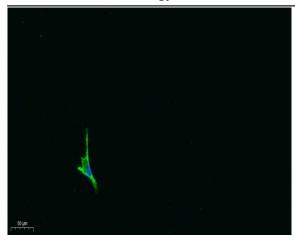
Secreted.

Expression:

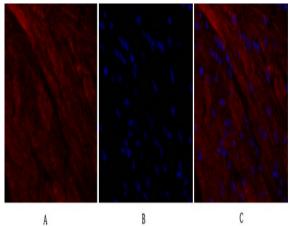
Highly expressed in adult lung, heart, kidney, liver, spleen, thymus, prostate, ovary, small intestine, thyroid, lymph node, trachea, adrenal gland, testis, and bone marrow. Detected at very low levels in brain, placenta and skeletal muscle.

Highly expressed in fetal kidney, liver and lung.

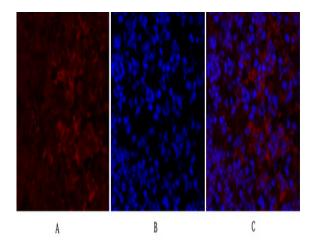
Products Images



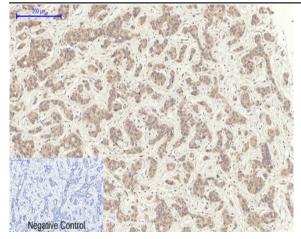
Immunofluorescence analysis of A549. 1,primary Antibody was diluted at 1:200(4°C overnight). 2, Goat Anti Rabbit IgG (H&L) - Alexa Fluor 488 Secondary antibody was diluted at 1:1000(room temperature, 50min).3, Picture B: DAPI(blue) 10min.



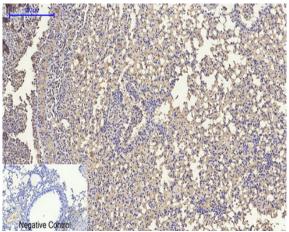
Immunofluorescence analysis of mouse-heart tissue. 1,OPG Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



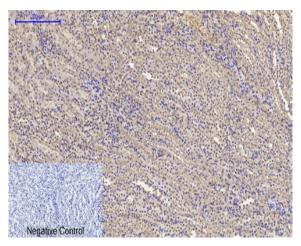
Immunofluorescence analysis of mouse-lung tissue. 1,OPG Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



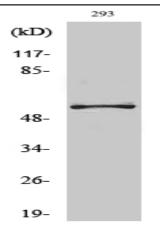
Immunohistochemical analysis of paraffin-embedded Human-liver-cancer tissue. 1,OPG Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used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



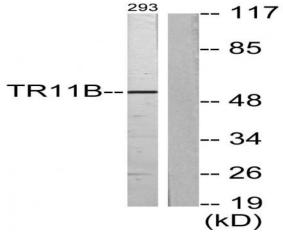
Immunohistochemical analysis of paraffin-embedded Mouse-lung tissue. 1,OPG Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary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



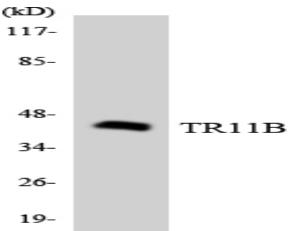
Immunohistochemical analysis of paraffin-embedded Mouse-kidney tissue. 1,OPG Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by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



Western Blot analysis of various cells using OPG Polyclonal Antibody diluted at 1:1000



Western blot analysis of lysates from 293 cells, using TR11B Antibody . The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from HeLa cells using TR11B antibody.