

Anti-OPG Antibody
Catalog # ABO11425**Specification**

Anti-OPG Antibody - Product Information

Application	WB
Primary Accession	O00300
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Tumor necrosis factor receptor superfamily member 11B(TNFRSF11B) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-OPG Antibody - Additional Information

Gene ID 4982

Other Names

Tumor necrosis factor receptor superfamily member 11B, Osteoclastogenesis inhibitory factor, Osteoprotegerin, TNFRSF11B, OCIF, OPG

Calculated MW

46026 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

Subcellular Localization

Secreted.

Tissue Specificity

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.

Protein Name

Tumor necrosis factor receptor superfamily member 11B

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human Osteoprotegerin(369-389aa IRFLHSFTMYKLYQKLFLEMI), different from the related rat sequence by

one amino acid, and different from the related mouse sequence by two amino acids.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Contains 2 death domains.

Anti-OPG Antibody - Protein Information

Name TNFRSF11B

Synonyms OCIF, OPG

Function

Acts as a decoy receptor for TNFSF11/RANKL and thereby neutralizes its function in osteoclastogenesis. Inhibits the activation of osteoclasts and promotes osteoclast apoptosis in vitro. Bone homeostasis seems to depend on the local ratio between TNFSF11 and TNFRSF11B. May also play a role in preventing arterial calcification. May act as decoy receptor for TNFSF10/TRAIL and protect against apoptosis. TNFSF10/TRAIL binding blocks the inhibition of osteoclastogenesis.

Cellular Location

Secreted.

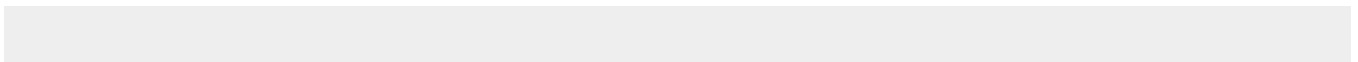
Tissue Location

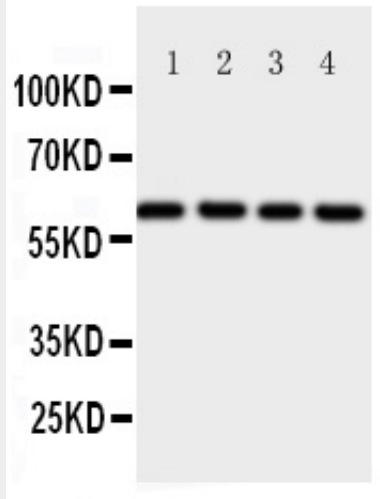
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Anti-OPG Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-OPG Antibody - Images



Anti-Osteoprotegerin antibody, ABO11425, Western blotting All lanes: Anti Osteoprotegerin (ABO11425) at 0.5ug/ml
Lane 1: A549 Whole Cell Lysate at 40ug
Lane 2: PC-12 Whole Cell Lysate at 40ug
Lane 3: HELA Whole Cell Lysate at 40ug
Lane 4: M453 Whole Cell Lysate at 40ug
Predicted bind size: 46KD
Observed bind size: 60KD

Anti-OPG Antibody - Background

Tumor necrosis factor receptor superfamily member 11B (TNFRSF11B), also known as OPG, is a protein that in humans is encoded by the TNFRSF11B gene. OPG is a cytokine receptor, and a member of the tumor necrosis factor (TNF) receptor superfamily. By analysis of radiation hybrids, TNFRSF11B gene was mapped to chromosome 8q24. OPG is a decoy receptor for the receptor activator of nuclear factor kappa B ligand (RANKL). By binding RANKL, OPG inhibits nuclear factor kappa B (NF-kappa B) which is a central and rapid acting transcription factor for immune-related genes, and a key regulator of inflammation, innate immunity, and cell survival and differentiation. OPG binding to RANKL on osteoblast/stromal cells, blocks the RANKL-RANK ligand interaction between osteoblast/stromal cells and osteoclast precursors.