

## **Anti-Osteoprotegerin Antibody**

Rabbit polyclonal antibody to Osteoprotegerin Catalog # AP60037

### **Specification**

## **Anti-Osteoprotegerin Antibody - Product Information**

Application WB, IH, IF
Primary Accession O00300
Other Accession O08712

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 46026

## **Anti-Osteoprotegerin Antibody - Additional Information**

### **Gene ID 4982**

#### **Other Names**

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

# **Target/Specificity**

Recognizes endogenous levels of Osteoprotegerin protein.

#### Dilution

WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200), IF/IC (1/100 - 1/500) IH~~WB (1/500 - 1/1000), IH (1/100 - 1/200), IF/IC (1/100 - 1/500) IF~~WB (1/500 - 1/1000), IH (1/100 - 1/200), IF/IC (1/100 - 1/500)

## **Format**

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

### Storage

Store at -20 °C. Stable for 12 months from date of receipt

### **Anti-Osteoprotegerin 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**

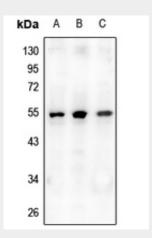
Highly expressed in adult lung, heart, kidney, liver, spleen, thymus, prostate, ovary, small intestine, thyroid, lymph node, trachea, adrenal gland, testis, and bone marrow. Detected at very low levels in brain, placenta and skeletal muscle. Highly expressed in fetal kidney, liver and lung

# **Anti-Osteoprotegerin Antibody - Protocols**

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

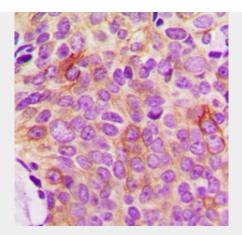
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# **Anti-Osteoprotegerin Antibody - Images**

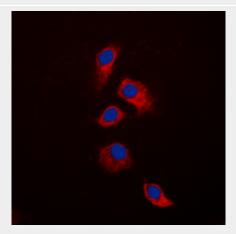


Western blot analysis of Osteoprotegerin expression in HepG2 (A), HEK293T (B), LO2 (C) whole cell lysates.





Immunohistochemical analysis of Osteoprotegerin staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of Osteoprotegerin staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

### Anti-Osteoprotegerin Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human Osteoprotegerin. The exact sequence is proprietary.