

#### **TNFRSF11B** Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1488a

#### Specification

# **TNFRSF11B Antibody - Product Information**

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW **Description**  WB, IHC, E <u>000300</u> Human Mouse Monoclonal IgG1 60kDa KDa

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.

Immunogen Purified recombinant fragment of human TNFRSF11B expressed in E. Coli.

**Formulation** Ascitic fluid containing 0.03% sodium azide. <br /> <br />

### **TNFRSF11B** Antibody - Additional Information

Gene ID 4982

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

Dilution WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 E~~N/A

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

TNFRSF11B Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



# **TNFRSF11B 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

### **TNFRSF11B Antibody - Protocols**

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

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

**TNFRSF11B** Antibody - Images





Figure 1: Western blot analysis using TNFRSF11B mAb against HEK293 (1) and TNFRSF11B(AA: 22-401)-hlgGFc transfected HEK293 (2) cell lysate.



Figure 2: Immunohistochemical analysis of paraffin-embedded mammary cancer tissues (left) and lung cancer tissues (right) using TNFRSF11B mouse mAb with DAB staining.

# TNFRSF11B Antibody - References

1. Am J Hypertens. 2009 Nov;22(11):1167-70. 2. Am J Hum Genet. 2009 Nov;85(5):628-42.