10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

TNFRSF11B Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1477a

Specification

TNFRSF11B Antibody - Product Information

Application	**WB, FC, ICC, E**
Primary Accession	O00300
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**60kDa KDa**

Description
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.

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
FC~~1/200 - 1/400
ICC~~N/A
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.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

TNFRSF11B Antibody - Images

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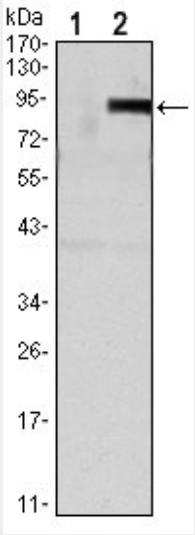

Figure 1: Western blot analysis using TNFRSF11B mAb against HEK293 (1) and TNFRSF11B(AA: 22-401)-hIgGFc transfected HEK293 (2) cell lysate.

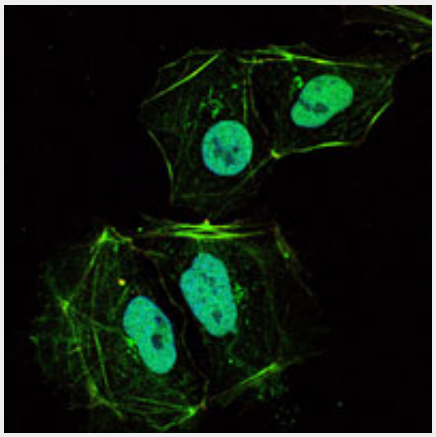

Figure 2: Immunofluorescence analysis of HL-60 cells using TNFRSF11B mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye.

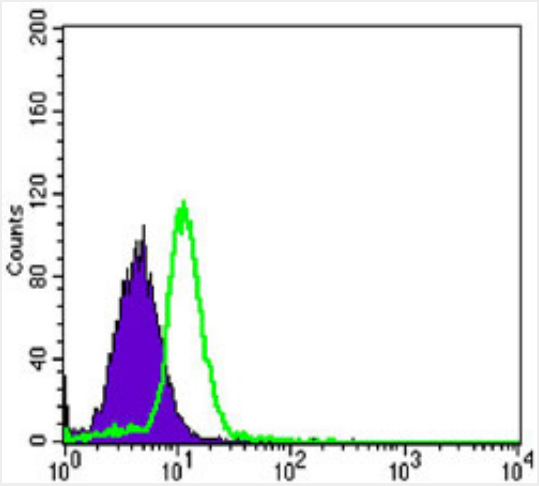

Figure 3: Flow cytometric analysis of HL-60 cells using TNFRSF11B mouse mAb (green) and negative control (purple).

TNFRSF11B Antibody - References

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