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TNFRSF11B Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1477a

Product Information

Application	WB, FC, ICC, E
Primary Accession	O00300
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	5G2
Isotype	IgG1
Calculated MW	46026
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.

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.

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

References

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

Images

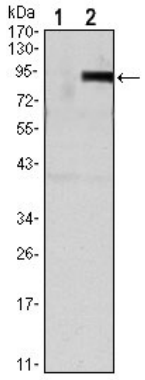


Figure 1: Western blot analysis using TNFRSF11B mAb against HEK293 (1) and TNFRSF11B(AA: 22-401)-hIgGFc transfected HEK293 (2) cell lysate.

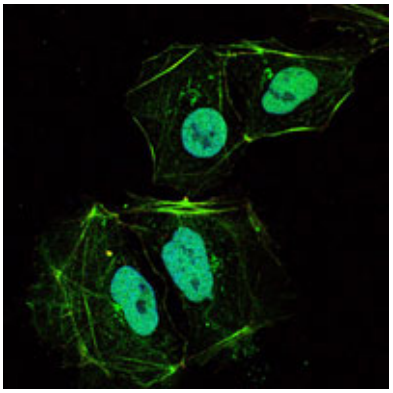
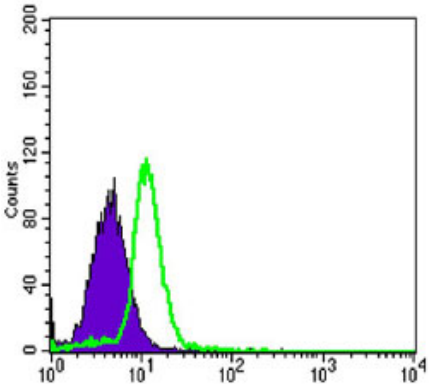


Figure 2: Immunofluorescence analysis of HL-60 cells using TNFRSF11B mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye.

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



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