

TNFRSF11B Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1488a

Product Information

Application WB, IHC, E **Primary Accession** 000300 Reactivity Human Host Mouse Monoclonal Clonality **Clone Names** 5A11 Isotype IgG1 46026 **Calculated MW**

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 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.

PrecautionsTNFRSF11B 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

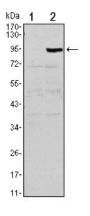


Figure 1: Western blot analysis using TNFRSF11B mAb against HEK293 (1) and TNFRSF11B(AA: 22-401)-hIgGFc transfected HEK293 (2) cell lysate.

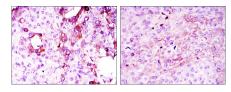


Figure 2: Immunohistochemical analysis of paraffin-embedded mammary cancer tissues (left) and lung cancer tissues (right) using TNFRSF11B mouse mAb with DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.