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# TNFRSF11B Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1488a

## Product Information

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| **Application** | WB, IHC, E |
| **Primary Accession** | O00300 |
| **Reactivity** | Human |
| **Host** | Mouse |
| **Clonality** | Monoclonal |
| **Clone Names** | 5A11 |
| **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

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| **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. |

## Protein Information

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| **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

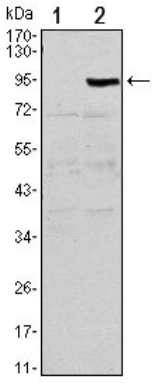



Figure 1: Western blot analysis using TNFRSF11B mAb against HEK293 (1) and TNFRSF11B(AA: 22-401)-hIgGFc transfected HEK293 (2) cell lysate.

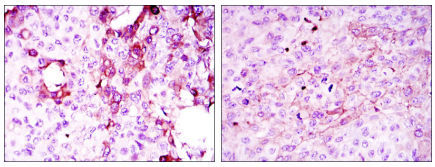


Figure 2: Immunohistochemical analysis of paraffin-embedded mammary cancer tissues (left) and lung cancer tissues (right) using TNFRSF11B mouse mAb with DAB staining.

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