

TNFRSF11B Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP13738C

Specification

TNFRSF11B Antibody (Center) - Product Information

IHC-P, IF, WB,E
<u>000300</u>
<u>NP_002537.3</u>
Human
Rabbit
Polyclonal
Rabbit IgG
46026
243-271

TNFRSF11B Antibody (Center) - Additional Information

Gene ID 4982

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

Target/Specificity

This TNFRSF11B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 243-271 amino acids from the Central region of human TNFRSF11B.

Dilution IHC-P~~1:10~50 IF~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

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

Precautions

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

TNFRSF11B Antibody (Center) - 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 (Center) - 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 (Center) - Images



Confocal immunofluorescent analysis of TNFRSF11B Antibody (Center) (Cat#AP13738c) with NCI-H460 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).





TNFRSF11B Antibody (Center) (Cat. #AP13738c) western blot analysis in NCI-H460 cell line lysates (35ug/lane). This demonstrates the TNFRSF11B antibody detected the TNFRSF11B protein (arrow).



TNFRSF11B Antibody (Center) (AP13738c)immunohistochemistry analysis in formalin fixed and paraffin embedded human kidney carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of TNFRSF11B Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

TNFRSF11B Antibody (Center) - Background

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.

TNFRSF11B Antibody (Center) - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)



Liu, J.M., et al. J. Clin. Endocrinol. Metab. 95 (9), E112-E120 (2010) : Lieb, W., et al. Arterioscler. Thromb. Vasc. Biol. 30(9):1849-1854(2010) Paternoster, L., et al. J. Clin. Endocrinol. Metab. 95(8):3940-3948(2010) Hsu, Y.H., et al. PLoS Genet. 6 (6), E1000977 (2010) :