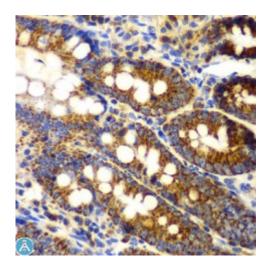


Anti-TNFSF11 Antibody



Description This gene encodes a member of the tumor necrosis factor (TNF) cytokine

family which is a ligand for osteoprotegerin and functions as a key factor for osteoclast differentiation and activation. This protein was shown to be a dentritic cell survival factor and is involved in the regulation of T cell-dependent immune response. T cell activation was reported to induce expression of this gene and lead to an increase of osteoclastogenesis and bone loss. This protein was shown to activate antiapoptotic kinase AKT/PKB through a signaling complex involving SRC kinase and tumor necrosis factor receptor-associated factor (TRAF) 6, which indicated this protein may have a role in the regulation of cell apoptosis. Targeted disruption of the related gene in mice led to severe osteopetrosis and a lack of osteoclasts. The deficient mice exhibited defects in early differentiation of T and B lymphocytes, and failed to form lobulo-alveolar mammary structures during pregnancy. Two alternatively spliced transcript variants have been found.

Model STJ115528

Host Rabbit

Reactivity Human, Mouse, Rat

Applications IF, IHC

Immunogen Recombinant fusion protein containing a sequence corresponding to amino

acids 78-317 of human TNFSF11 (NP_003692.1).

Gene ID <u>8600</u>

Gene Symbol TNFSF11

Dilution range IHC 1:50 - 1:200

IF 1:50 - 1:200

Tissue Specificity Highest in the peripheral lymph nodes, weak in spleen, peripheral blood

Leukocytes, bone marrow, heart, placenta, skeletal muscle, stomach and

thyroid

Purification Affinity purification

Note For Research Use Only (RUO).

Protein Name Tumor necrosis factor ligand superfamily member 11 Osteoclast

differentiation factor ODF Osteoprotegerin ligand OPGL Receptor activator of nuclear factor kappa-B ligand RANKL TNF-related activation-induced

cytokin

Molecular Weight 35.478 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Storage Instruction Store at -20C. Avoid freeze / thaw cycles.

Database Links HGNC:11926OMIM:259710Reactome:R-HSA-5668541

Alternative Names Tumor necrosis factor ligand superfamily member 11 Osteoclast

differentiation factor ODF Osteoprotegerin ligand OPGL Receptor activator of nuclear factor kappa-B ligand RANKL TNF-related activation-induced

cytokin

Function Cytokine that binds to TNFRSF11B/OPG and to TNFRSF11A/RANK,

Osteoclast differentiation and activation factor, Augments the ability of dendritic cells to stimulate naive T-cell proliferation, May be an important regulator of interactions between T-cells and dendritic cells and may play a role in the regulation of the T-cell-dependent immune response, May also play an important role in enhanced bone-resorption in humoral hypercalcemia of

malignancy,

Cellular Localization Cell membrane

Post-translational The soluble form of isoform 1 derives from the membrane form by proteolytic

Modifications processing, The cleavage may be catalyzed by ADAM17,

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