



RANKL Monoclonal Antibody

Catalog No	YP-mAb-14022
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	TNFSF11
Immunogen	The antiserum was produced against synthesized peptide derived from the C-terminal region of human TNFSF11. AA range:268-317
Specificity	RANKL Monoclonal Antibody detects endogenous levels of RANKL protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	TNFSF11;Tumor necrosis factor ligand superfamily member 11;TNF-related activation-induced cytokine;Receptor activator of nuclear factor kappa-B ligand; CD254;RANKL;OPGL;TRANCE;Osteoclast differentiation factor;ODF; Osteoprotegerin ligand;OPGLReceptor activator of nuclear factor kappa-B ligand
Observed Band	35kD
Calculated Molecular Weight	35kD
Cell Pathway	[Isoform 1]: Cell membrane; Single-pass type II membrane protein.; [Isoform 3]: Cell membrane; Single-pass type II membrane protein.; [Isoform 2]: Cytoplasm .; [Tumor necrosis factor ligand superfamily member 11, soluble form]: Secreted .
Tissue Specificity	Highest in the peripheral lymph nodes, weak in spleen, peripheral blood Leukocytes, bone marrow, heart, placenta, skeletal muscle, stomach and thyroid.
Function	disease:Defects in TNFSF11 are the cause of osteopetrosis autosomal recessive type 2 (OPTB2) [MIM:259710]; also known as osteoclast-poor osteopetrosis. Osteopetrosis is a rare genetic disease characterized by abnormally dense bone, due to defective resorption of immature bone. The disorder occurs in two forms: a severe autosomal recessive form occurring in utero, infancy, or childhood, and a benign autosomal dominant form occurring in adolescence or adulthood. Autosomal recessive osteopetrosis is usually



associated with normal or elevated amount of non-functional osteoclasts. OPTB2 is characterized by paucity of osteoclasts, suggesting a molecular defect in osteoclast development. 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

Background

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 dendritic 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 ly

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using RANKL Monoclonal Antibody