



Rabbit Anti-RANKL/CD254 antibody

SL20647R

Product Name:	RANKL/CD254
Chinese Name:	骨保护蛋白配体/破骨Cell differentiation因子抗体
Alias:	OPGL; CD254; hRANKL2; ODF; OPGL; Osteoclast differentiation factor; Osteoprotegerin ligand; RANKL; Receptor activator of nuclear factor kappa B ligand; sOdf; SOFA; TNF related activation induced cytokine; TNFSF 11; TNFSF11; TRANCE; Tumor necrosis factor ligand superfamily member 11; Osteoprotegerin Ligand; TNF11 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Horse,Rabbit,
Applications:	WB=1:500-2000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	35kDa
Cellular localization:	cytoplasmicThe cell membraneSecretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human RANKL/CD254:131-230/317
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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. [provided by RefSeq, Jul 2008].

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.

Subcellular Location:

Cytoplasm; Secreted and Cell membrane.

Tissue Specificity:

Highest in the peripheral lymph nodes, weak in spleen, peripheral blood Leukocytes, bone marrow, heart, placenta, skeletal muscle, stomach and thyroid.

Post-translational modifications:

The soluble form of isoform 1 derives from the membrane form by proteolytic processing. The cleavage may be catalyzed by ADAM17.

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.

Similarity:

Belongs to the tumor necrosis factor family.

SWISS:

O14788

Gene ID:
8600

Database links:

[Entrez Gene: 8600](#)Human

[Entrez Gene: 21943](#)Mouse

[Omim: 602642](#)Human

[SwissProt: O14788](#)Human

[SwissProt: O35235](#)Mouse

[Unigene: 333791](#)Human

[Unigene: 249221](#)Mouse

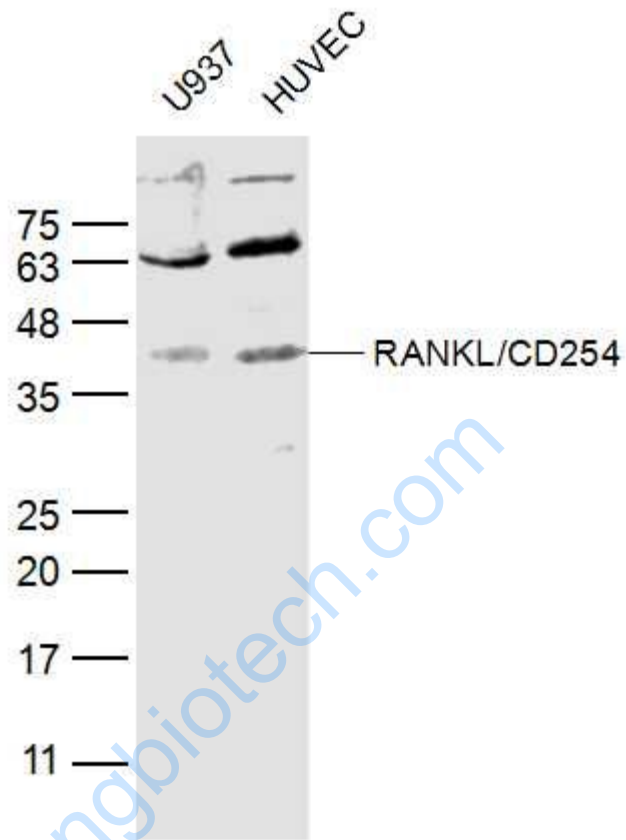
Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

OPGL骨保护蛋白配体又称骨保护素配体(破骨细胞发育刺激因子)。属Tumour坏死因子TNF- α 家族。

OPGL促进破骨细胞的分化和活性,而OPG抑制这些过程。骨髓瘤细胞影响骨髓中这两种蛋白的生理平衡,是发生溶骨性病变的根本所在。

Picture:



Sample:

U937(Human) Cell Lysate at 40 ug

HUVEC(Human) Cell Lysate at 40 ug

Primary: Anti-RANKL/CD254 (SL20647R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 35 kD

Observed band size: 35 kD