

Rabbit Anti-RANKL/CD254 antibody

SL20646R

| 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, Pig, Cow, 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/CD254:41-140/317 |
| 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: 014788

| | Gene ID: 8600 |
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| | Database links: |
| | Entrez Gene: 8600Human |
| | Entrez Gene: 21943Mouse |
| | <u>Omim: 602642</u> Human |
| | SwissProt: O14788Human |
| | SwissProt: O35235Mouse |
| | Unigene: 333791Human |
| | Unigene: 249221Mouse |
| | |
| | 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 |
| | |
| | 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: | $ \begin{array}{c} 135 \\ 100 \\ 75 \\ 63 \\ 48 \\ 35 \\ 25 \\ 17 \\ 17 \\ 17 \\ 17 \\ 17 \\ 17 \\ 17 \\ 17$ |
| | Sample: |

| Lung (Mouse) Lysate at 40 ug |
|--|
| Primary: Anti-CD254 (SL20646R) at 1/300 dilution |
| Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution |
| Predicted band size: 35 kD |
| Observed band size: 37/50 kD |
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