

### TNFSF11 / RANKL / TRANCE Antibody (Internal)

Rabbit Polyclonal Antibody Catalog # ALS11732

# **Specification**

## TNFSF11 / RANKL / TRANCE Antibody (Internal) - Product Information

Application IHC
Primary Accession 014788

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 35kDa KDa

#### TNFSF11 / RANKL / TRANCE Antibody (Internal) - Additional Information

#### **Gene ID 8600**

#### **Other 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 cytokine, TRANCE, CD254, Tumor necrosis factor ligand superfamily member 11, membrane form, Tumor necrosis factor ligand superfamily member 11, soluble form, TNFSF11, OPGL, RANKL, TRANCE

### Target/Specificity

14 amino acid peptide from near the center of human sRANK-L

#### **Reconstitution & Storage**

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

### **Precautions**

TNFSF11 / RANKL / TRANCE Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

## TNFSF11 / RANKL / TRANCE Antibody (Internal) - Protein Information

#### Name TNFSF11

Synonyms OPGL, RANKL, TRANCE

#### **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 (PubMed:<a href="http://www.uniprot.org/citations/22664871" target="\_blank">22664871</a>). Induces osteoclastogenesis by activating multiple signaling pathways in osteoclast precursor cells, chief



among which is induction of long lasting oscillations in the intracellular concentration of Ca (2+) resulting in the activation of NFATC1, which translocates to the nucleus and induces osteoclast-specific gene transcription to allow differentiation of osteoclasts. During osteoclast differentiation, in a TMEM64 and ATP2A2-dependent manner induces activation of CREB1 and mitochondrial ROS generation necessary for proper osteoclast generation (By similarity).

### **Cellular Location**

[Isoform 1]: Cell membrane; Single-pass type II membrane protein [Isoform 2]: Cytoplasm.

#### **Tissue Location**

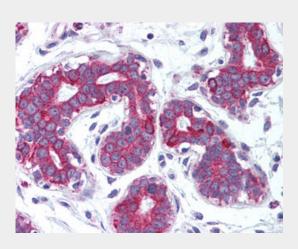
Highest in the peripheral lymph nodes, weak in spleen, peripheral blood Leukocytes, bone marrow, heart, placenta, skeletal muscle, stomach and thyroid

#### TNFSF11 / RANKL / TRANCE Antibody (Internal) - Protocols

Provided below are standard protocols that you may find useful for product applications.

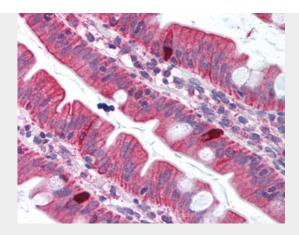
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## TNFSF11 / RANKL / TRANCE Antibody (Internal) - Images



Anti-RANKL antibody IHC of human breast.





Anti-RANKL antibody IHC of human small intestine.

# TNFSF11 / RANKL / TRANCE Antibody (Internal) - Background

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## TNFSF11 / RANKL / TRANCE Antibody (Internal) - References

Anderson D.M.,et al.Nature 390:175-179(1997). Lacey D.L.,et al.Cell 93:165-176(1998). Ikeda T.,et al.Submitted (JUN-2001) to the EMBL/GenBank/DDBJ databases. Nagai M.,et al.Biochem. Biophys. Res. Commun. 269:532-536(2000). Wong B.R.,et al.J. Biol. Chem. 272:25190-25194(1997).