

TNFSF11 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP8895a**Specification**

TNFSF11 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [O14788](#)**TNFSF11 Antibody (N-term) Blocking Peptide - 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

The synthetic peptide sequence used to generate the antibody [AP8895a](/products/AP8895a) was selected from the N-term region of human TNFSF11. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

TNFSF11 Antibody (N-term) Blocking Peptide - 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:<http://www.uniprot.org/citations/22664871> target="_blank">22664871). 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 Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

TNFSF11 Antibody (N-term) Blocking Peptide - Images**TNFSF11 Antibody (N-term) Blocking Peptide - Background**

TNFSF11 is 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.

TNFSF11 Antibody (N-term) Blocking Peptide - References

Wong,B.R., et.al., J. Exp. Med. 186 (12), 2075-2080 (1997)