abcam

Product datasheet

Recombinant human RANKL protein ab9958

1 References

Overview

Product name	Recombinant human RANKL protein
Protein length	Protein fragment

Description

Nature	Recombinant
Source	Escherichia coli
Amino Acid Sequence	
Accession	O14788
Species	Human
Sequence	MEKAMVDGSW LDLAKRSKLE AQPFAHLTIN ATDIPSGSHK VSLSSWYHDR GWAKISNMTF SNGKLIVNQD GFYYLYANIC FRHHETSGDL ATEYLQLMVY VTKTSIKIPS SHTLMKGGST KYWSGNSEFH FYSINVGGFF KLRSGEEISI EVSNPSLLDP DQDATYFGAF KVRDID
Molecular weight	35 kDa

Specifications

Our Abpromise guarantee covers the use of **ab9958** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Functional Studies SDS-PAGE
Endotoxin level	< 0.100 Eu/µg
Form	Lyophilised
Additional notes	The biological activity of this product was determined by its ability to induce NFkappaB in RAW264.7 cells in the absence of any cross-linking. The expected ED50 for this effect is 10.0-25.0 ng/ml.

Preparation and Storage

Stability and Storage	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle. pH: 7.60 Constituents: 0.082% Sodium phosphate, 0.435% Sodium chloride This product is an active protein and may elicit a biological response in vivo, handle with caution.

General Info

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.
Tissue specificity	Highest in the peripheral lymph nodes, weak in spleen, peripheral blood Leukocytes, bone marrow, heart, placenta, skeletal muscle, stomach and thyroid.
Involvement in 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.
Sequence similarities	Belongs to the tumor necrosis factor family.
Post-translational modifications	The soluble form of isoform 1 derives from the membrane form by proteolytic processing (By similarity). The cleavage may be catalyzed by ADAM17.
Cellular localization	Cytoplasm; Secreted and Cell membrane.

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